

PREDICTORS OF THERAPEUTIC THEORETICAL ORIENTATION IN A
VOCATIONAL CONTEXT

By

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Abstract

Given the findings that hold theoretical orientations at the same level with one another in regard to therapeutic effectiveness (referred to as relative efficacy), orientation is nevertheless highly valued in therapist development. There have also been numerous findings that orientation selection affects practitioner satisfaction, as well as burnout (Fear & Woolfe, 1999; Vasco, Garcia-Marques, & Dryden, 1993). Despite the importance of theory in clinical practice, there is little research surrounding therapist variables in the development of theoretical orientation (Bitar, Bean, & Bermudez, 2007). Given the lack of research, as well as the shift in landscape of theoretical orientation, the current study utilized Holland's vocational typology to predict theoretical orientation in graduate trainees and professional clinicians, using an updated orientation scale to include more recent theories (e.g., integrative, third-wave contextual, multicultural). Results showed that counseling psychologists identified as more humanistic compared to their clinical psychology counterparts, and both social work and counseling psychology participants identified as more Social in Holland's typology compared to the clinical psychology participants. The Investigative type was additionally found to significantly predict both CBT and behaviorism. Clinical implications are discussed in terms of how these findings can facilitate theoretical orientation exploration in graduate trainees.

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Chapter I

Introduction

Whether a person is entering the work force for the first time or changing careers after a longstanding vocation, occupational transitions can affect physical and emotional health, as well as overall life satisfaction. Occupational problems lead to a number of negative consequences for individuals, and yet vocational research is often overlooked compared to the mainstream field of psychology as a whole (Super & Knasel, 1981). Savickas, Briddick, and Watkins Jr. (2002) suggest that this is in part due to the fact that vocational psychologists derive their constructs from basic principles in psychology, but they do not link their findings back to these disciplines. For instance, the authors indicate that much of the early research in vocational psychology has roots in developmental psychology, yet these researchers tend not to link their findings back to developmental psychology, nor did they attend to innovations in developmental psychology. Originally, Parsons (1909), who has been credited with the genesis of career counseling, argued that a “person-environment fit” was necessary for choosing an ideal career trajectory, and that successful careers are based on matching a person’s singular traits to occupational traits; this has been coined “trait-and-factor theory.” Much like the numerous personality traits that exist within any one person, vocational interests were viewed through a similar lens in that a person can “match” vocational interests based on said traits.

Perhaps the most well researched vocational model is Holland’s Theory of Vocational Choice (Holland, 1959), which outlines a theory of person-environment fit for individual traits and occupational positions. Holland codes (Holland, 1985) are one such method of assigning each individual person a typology, similar to that of personality.

This typology consists of: Realistic, Investigative, Artistic, Social, Enterprising, and Conventional. Each type is characterized by a constellation of interests, preferred activities, beliefs, abilities, values, and characteristics. The Realistic type is related to realism, practicality, and conventionality. Those who subscribe more to the Investigative type are described as scholarly, persistent, and intelligent. Artistic types are imaginative, original, unconventional, and introverted, and the Social type indicates sociability, passivity, problem solving through feelings rather than thinking, and femininity. Traits associated with the Enterprising type include dominance, risk-taking, and enthusiasm. Lastly, the Conventional type includes characteristics of conformity, self-control, productivity and effectiveness in well-structured tasks, and acceptance of cultural values and attitudes (Holland, 1985).

Holland (1996) discussed the concept of continuity, which means staying in the same job or moving among jobs that belong to the same occupational category. He suggests that matching based on vocational interests is particularly successful due to this occupational continuity, citing his finding that after examining a sample of 989 men ages 30 to 39, seventy-nine percent of the 5,812 job transitions up to age 39 occurred within a single major job category, demonstrating that people tend to move among similar jobs. Additionally, Holland pointed out that the category of a high school student's vocational aspirations predict the category of actual employment 11 years later, and the predictive value of aspiration increased when predictions were made at older ages (McLaughlin & Tiedeman, 1974). Holland and Gottfredson (1975) further indicated that a person's current vocational aspirations are significantly related to most of his or her earlier aspirations, demonstrating that an individual's current and previous aspirations form a

cohesive, predictable pattern. In contrast, Savickas (2000) stated that while this matching, person-to-person paradigm has served individuals well in the past, it assumes stable occupations and predictable career paths, both of which are unrealistic - not to mention an unpredictable and often-volatile economy.

Super, Savickas, and Super (1996) created the life-span, life-space theory, which is a well-researched discussion of vocational transitions. Instead of simply viewing an individual's vocational psychology in terms of "traits and factors," they took into account the developmental context through which people grow and develop. Interestingly, the theory does not assume that work is the central role in a person's life, but rather it highlights the importance of the work role in relation to additional roles. Specifically, individuals live in multiple-role environments, in which family roles, work roles, educational roles, and community roles vary in the demands as well as the significance for a particular person (Herr, 1997). Savickas (1997) posited that this theory responds in part to postmodern and feminist criticisms of vocational psychology: "For example, Richardson (1993) pointed out that traditional career counseling focuses on the work role and emphasizes interactions with an employer while ignoring the multiple contexts of a life" (p. 251). Richardson (1993) argued for psychologists not to concentrate on the careers themselves, but rather on the role the career plays in a person's life, thus fostering their overall development and wellbeing while still facilitating the match between occupation and personality.

Within the life-span, life-space theory, Super, Savickas, and Super (1996) discussed the concept of career maturity, which consists of five developmental markers for readiness to make educational and vocational decisions: Growth (4 to 13 years old;

children are developing their capacities, attitudes, interests, and forming a general understanding of the world of work), Exploration (14 to 24 years old; individuals attempt to understand themselves through classes, work, hobbies, and tentative occupational choices), Establishment (25 to 44 years old; individuals have gained an appropriate position in their chosen field of work, and strive to pursue chances for further advancement), Maintenance (45 to 65 years old; individuals strive to maintain what they have achieved, and update their competencies and find innovative ways of performing their job routines), and Disengagement (65 years and greater; the period of transition out of the workforce, when individuals plan for retirement and retirement living). No longer was the emphasis on the choice of original entry into the labor force as an event in late adolescence, but rather career development was being seen as a life-span process that was made up of several transitions. To illustrate this model, Super created the Life-Career Rainbow graphic, which is a device that portrays the different sects of career development discussed above. During different parts of the life span, individuals hold different roles such as child, student, citizen, homemaker, spouse, parent, or soldier. The arcs of the rainbow allow an individual to identify the life career roles one has played and for how long. For Super (1980), the rainbow was meant to convey the notion that “the simultaneous combination of life roles constitutes the life style; their sequential combination structures the *life* space and constitutes the *life*-cycle. The total structure is the *career pattern*” (p. 288).

While this model makes sense for those individuals transitioning from school to work for the first time, Ebberwein, Krieschok, Ulven, and Prosser (2004) point out that the emphasis on maturity became less applicable as more individuals experienced economic

difficulties, and ultimately career transitions. Similarly, Krieshok, Black, and McKay (2009) suggest that the concept of career maturity implies an eventual end to a process, rather than the inevitable series of transitions in one's life. Research thus began focusing on the acquisition of skills in service of multiple successful career transitions throughout adulthood, rather than just the initial school-to-work job search most often seen in young adulthood or late adolescence.

Savickas (1997) proposed that career maturity be replaced with the term "career adaptability" in terms of the central construct of career development theory. Originally described by Super and Knasel (1981), adaptability refers to the quality of one's ability to change without great difficulty, or to be flexible in new or changing environments.

Savickas (1997) defines career adaptability as "the readiness to cope with the predictable tasks of preparing for and participating in the work role and with the unpredictable adjustments prompted by changes in work and working conditions" (p. 254).

Specifically, Super and Knasel considered career adaptability to be a function of five dimensions: 1) planfulness, or the importance of preparation in respect to life events, 2) exploration, or the act of deriving relevant career information, 3) information and skills, or the ability to use information in the interest of career adaptability, 4) decision making, or awareness of career decision-making principles, and 5) reality orientation, or knowledge of self and situations as they relate to coping with the tasks of career development (Cairo, Kritis, & Myers, 1996). Career adaptability focuses attention on clients of all ages, across all life roles, in anticipating choices and transitions, exploring options, and make decisions that maximize fit with individual traits. Taking a proactive

approach, this model views vocational transition as inevitable, rather than something to be avoided.

In further studying the concept of career adaptability, Ebberwein et al. (2004) contacted approximately 200 individuals who were in job transitions of some fashion, whether long-term unemployment or recent layoffs. Twenty-one eventually agreed to be interviewed, and the researchers found the emergence of five career adaptability themes from the qualitative interview information. Specifically, individuals who are more adaptive tend to “get off to a good start, think about and plan for their future, anticipate change and react when they see it coming, are cautious about stopgap employment, and know how to achieve realistic goals” (p. 304). The authors elaborate by stating that career adaptability is contingent first and foremost on planfulness, as well as a realistic sense of personal and contextual factors that affect the situation at hand. Of course, there are external factors, such as financial pressures, familial responsibilities, or difficult employers, which one has less control over. Ebberwein et al. recommend that career counselors can most effectively assist by balancing paying attention to the intense emotional response that often accompanies a career transition, while also facilitating thoughtful action (as opposed to thoughtless reaction).

The career exploration facet of adaptability has particularly been examined closely, with some researchers suggesting career exploration be viewed as a lifelong, adaptive process that is “as unplanned and fortuitous as it is planned and systematic” (Krieshok, Black, & McKay, 2009; p. 277). Krieshok, Black, and McKay created the concept of *occupational engagement*, which refers to “taking part in behaviors that contribute to the career decision-maker’s fund of information and experience of the larger

world, not just the world as processed when a career decision is imminent” (p. 284). The authors suggest that as a result of occupational engagement, an individual makes adaptive career decision-making more likely via accumulation of information and experience. This concept was created in response to acknowledging the limits of decision-making. Kahneman (2003) theorized that humans innately hold a “two-system” model of information processing and decision-making: System 1 refers to the “intuitive mode of processing,” whereas System 2 is known as the “rational mode.” Krieshok, Black, and McKay illustrated the limits that exist when relying solely on the rational mind, which is prone to error, while at the same time having an abundance of simultaneous non-conscious processes that makes arriving at a decision difficult. Thus, occupational engagement functions as a combination of the two processes, while focusing on enrichment and exploration. Exploration refers to collecting information in preparation for making an immediate decision, and enrichment refers to gaining knowledge that can be applied to future choices. Rather than looking through the lens of the matching model and thinking in terms of *one* match, this model encourages the consideration of ongoing matching, “with frequent scans to see how well the current match is working in the evolving world of work and in one’s own evolving set of strengths and interests” (Krieshok, Black, & McKay, 2009; p. 287).

Occupational engagement is compatible with the planned happenstance model (Mitchell, Levin, & Krumboltz, 1999), which teaches individuals to place themselves in situations that maximize the probability they will be exposed to opportunities. Taking this perspective, the Happenstance Learning Theory (HLT; Krumboltz, 2009) applies itself nicely. HLT posits that the goal of career counseling is not to make a single career

decision; rather, clients should learn to engage in behaviors that lead to more satisfying career and personal lives. More specifically, Krumboltz claims that individuals should participate in more exploratory actions as a way of generating desirable, unplanned events. This could mean attending a career fair, networking at a professional conference, enrolling in community classes, or getting involved in a new hobby. When considering Bitar, Bean, and Bermudez's (2007) contextual theory discussed earlier (specifically the "professional" umbrella), HLT can be applied to understand how pursuing a number of these professional activities can lead to exploration of and exposure to a variety of theoretical orientations. One example is volunteering to consult with a faculty member, clinician, or classmate who is of a different theoretical orientation in order to gain more exposure. Furthermore, HLT preaches finding satisfaction in one's career exploration process, which proves fruitful in overall levels of happiness. Theoretical orientation can be viewed as a similar process, rather than a single decision. By engaging with the environment and other individuals, for example by attending a career fair, you are increasing the chances that a new opportunity arises. To use gambling vernacular, you are creating your own luck. In studying undergraduate students, Cox, Bjornsen, Krieshok, and Liu (2016) offer examples of occupational engagement that include interning, volunteering, working part time, conducting informational interviews, and job shadowing. The authors similarly indicate that this can include less job-specific tasks, such as attending presentations or seminars, visiting museums, joining clubs, and talking with workers to gauge their experience of work. Ideally, this process facilitates the formation of an interpersonal network that individuals can draw upon when considering career goals.

As previously discussed, it is naïve to choose an occupation based purely on an individual's personality type or vocational preferences. There are a variety of contextual factors to consider, be it socioeconomic status or trends in the economy. However, vocational preferences and personality type can function as a heuristic, containing significant value in guiding said decision-making. The same is true about theoretical orientation, which can be thought of as a career specialty of sorts. Poznanski and McLennan (1995) define theoretical orientation as a set of assumptions that provide a framework for counselors, which include creating a hypothesis regarding a client's behavior or experiences, while providing a rationale for treatment interventions and evaluation. The main purpose of this study is to examine factors that are related to the development and decision-making in a clinician's theoretical orientation, specifically within the vocational context that has been discussed thus far. In the following chapter, there will be an in-depth literature review pertaining to theoretical orientation, and how it relates to the broader field of vocational psychology.

Chapter II

Review of the Literature

The current chapter begins with the discussion of vocational identity and career specialty choice, which ties directly to the notion of theoretical orientation. A substantial portion of the chapter focuses on theoretical orientation literature, including varying definitions, cross-sectional and longitudinal surveys that measure the prevalence of theoretical orientations, and processes through which theoretical orientation can develop. Next, it examines how personality factors relate to theoretical orientation, followed by a brief discussion of the relationship between Holland Codes and theoretical orientation (including main findings and limitations of the literature). The chapter concludes with a brief description of the current study, including the main hypotheses that are being tested.

Vocational Identity

In the same study, Cox et al. found that occupational engagement positively predicted vocational identity, which refers to the degree of clarity regarding work-related plans and goals, and how those plans/goals relate to one's interests and strengths (Holland, 1997). Holland (1997) postulated that as a person's vocational identity increases, so too does their ability to make satisfying career-based decisions due to their increased understanding of themselves and their work. Interestingly, Carson and Moweslian (1991) found that a sense of vocational identity was more predictive of job satisfaction compared to congruence between interests and vocation, as seen in the theory of person-environment fit. Similarly, Gottfredson and Holland (1990) discovered that an individual's personal expectation of job satisfaction functions as a more accurate predictor of actual job satisfaction compared to the congruency of interests and jobs.

Holland (1997) proposed a relatively simple explanation for these findings: “A person with a clear sense of identity has an explicit and relatively stable picture of his or her goals, interests, skills, and suitable occupations. Therefore, a person with a clear sense of identity is more likely to accept or find work that is congruent with his or her personal characteristics and to persist in his or her search for a congruent work environment. In contrast, persons with a diffuse sense of identity are more likely to have a work history that is characterized by incompatible choices, frequent job changes, and a diverse set of successive jobs” (p. 403). In other words, while person-environment fit is undoubtedly important, there are a variety of contextual factors to consider, as discussed earlier. Vocational identity is important in that having a stronger sense of identity can drive an individual to engage in job-specific behaviors, ideally through a framework of occupational engagement. If an individual is unsure of his or her vocational identity, occupational engagement (exploration and enrichment) still effectively functions as a way to explore said identity.

It is important to emphasize the role of exploration in career development, especially for younger individuals who have less experience to draw upon in their repertoires. On the one hand, there is significant value in a high-school student having some form of vocational *calling*, or early drive toward a particular career. While the notion of calling is by no means novel (in fact, Hardy [1990] noted that aspects of calling have been part of the conversation on the role of work in human life since at least the 16th century), there is no clear definition for the concept. Dik, Duffy, and Eldridge (2009) conceptualize calling as consisting of three overlapping dimensions: a) “a transcendent summons, experienced as originating beyond the self,” b) “to approach a particular life

role in a manner oriented toward demonstrating or deriving a sense of purpose or meaningfulness,” and c) “that hold other-oriented values and goals as primary sources of motivation” (p. 625).

On the other hand, however, it is possible for an individual to over-commit from an early age, thus “foreclosing” on alternative possibilities that exist. Marcia (1966), in building off of Erikson’s lifelong research on ego identity, constructed a theory on identity status that operationalizes the four possible outcomes of what Erikson called the “quest for identity.” Marcia argued that these four potential statuses represent a complete and exhaustive conceptualization of identity development outcomes in humans, and therefore any person should be categorized into one of the following four statuses: diffusion, foreclosure, moratorium, or achievement. Identity diffusion is marked by a struggle of identity, involving no real progress in deciding on an occupation or ideology, with an absence of commitment to develop one’s sense of self. While in a state of foreclosure, an adolescent blindly accepts whatever ideology or values-system has been given to them. A common example of an individual in this stage is when a family member or parent pressures the individual into a particular profession; perhaps an undergraduate student deciding on a major, whose mother and father are both practicing lawyers, has received lifelong influence to pursue a law degree. If the student decides on pre-law as a major before considering alternative options, this is considered foreclosure. Moratorium marks little real commitment to an ideology or occupation, but is also a state of experimentation; this marks an ongoing identity crisis and the examination of alternate life choices. In contrast, identity achievement describes a state of clarity and development of one’s identity, while serving a commitment to an ideology or

occupational direction. It is worth noting that while Marcia's research was originally developed to describe identity development in adolescence due to the vulnerable psychological state occurring during this period, he did not believe that the identity process began and ended in adolescence. No matter the time period when a vocational transition occurs, the occupational engagement process contains equal importance. After all, it is not uncommon for an individual's career identity to evolve and mature as time elapses, whether it is finding a niche within a particular field or reinventing one's work role, as is seen with the theory of job crafting.

Job crafting is the process of employees redefining and reimagining their job designs in personally meaningful ways (Wrzesniewski & Dutton, 2001). These changes, in turn, can influence the meaningfulness of the work, which refers to work that employees believe is significant in that it serves an important purpose (Pratt & Ashforth, 2003). This becomes especially relevant as the economic climate changes, and the notion that employees work within a consistently stable job description becomes less common over time (Mohrman & Cohen, 1995). Their model was based on insights from previous research on how hairdressers, engineers, nurses, chefs, and hospital cleaners crafted their jobs, often without support or recognition from their employers. An important piece of the job crafting theory is the notion that employees construct their own experiences of the meaningfulness in their work by thinking about and performing their jobs in particular ways. "Thus, the job design that is formally prescribed to an employee from the top-down is only part of how the meaningfulness of the job is constructed—the other part is initiated and driven by the employee through job crafting" (Berg, Dutton, & Wrzesniewski, 2013; p. 84). Job crafting is a way to think about job design that puts

employees “in the driver’s seat” in cultivating meaningfulness in their work. Job crafters can proactively reshape the boundaries of their jobs, which in turn can positively influence a number of other phenomena linked to meaningfulness, such as job satisfaction, motivation, and overall performance (Berg, Dutton, & Wrzesniewski, 2013).

Within the medical field, specialty choice is analogous to vocational identity. Perhaps broader than the field of psychology, medicine offers a multitude of paths one can follow, whether it be general medicine, anesthesiology, neurology, gynecology, etc. Borges (2007) indicated that there are more than 100 specialties from which students can choose, illustrating the plethora of options and alternatives for specialty choice. Borges and Savickas (2002) describe physicians entering medical school as sharing numerous personality traits, and state that differences only begin to emerge after graduating medical school. Following graduation, physicians enter a variety of specialties that differ in setting, duties, skills, and vocational interests. The authors argue that some of these specialties differ so much, that they “almost constitute distinct occupations” (p. 362). Essentially, they indicate that deciding to become a physician is an educational choice that leads to a degree, but choosing a specialty is more closely linked to an occupational choice. Borges (2007) points out that there is little known regarding the process by which medical students choose their specialty and how certain aspects of medical education and training (e.g., rotations, classes) directly affect this decision-making process.

Given the overwhelming number of specialty choices a medical student has access to, career indecision is not an uncommon occurrence. While somewhat older, longitudinal studies from 1985 reported that between 60% and 75% of medical students

change their specialty choice during medical school, 20% of physicians in residency training switch to unrelated specialties, and 16% of physicians in practice change their specialty identification (Savickas, Alexander, Osipow, & Wolf, 1985). The concept of career indecision has been conceptualized as occurring continuously during the life span, and is not limited to early adulthood (Borges, 2007). Individuals may not make just one career decision, and may revise their career decisions over time when faced with different life events. Borges (2007) points out that for those in medicine, there are several transitional points where this can occur. First, the person has to choose medicine as a career, but soon after beginning their education in a medical school, questions arise regarding which specialty they should enter. The decision of medical specialty choice is often revisited as medical students progress through their curriculum and are exposed to the variety of different areas in the field. For some, transitional points can include whether to even enter a sub-specialty of medicine, and if so, which one. Borges (2007) studied this exploratory process in medical students with 91 first-year students, who enrolled in a course called the Ambulatory Care Experience (ACE). This course was designed so that students could experience a) early clinical exposure to medical environments (e.g., hospitals, clinics, and private practices), and b) interpersonal exposure via interactions with physicians in a variety of specialties. Throughout the course, mentoring relationships were formed, and positions for clerkships and shadowing were considered. Borges found that after completing the course, students experienced *even greater* uncertainty than before regarding their specialty choice. Borges offered several hypotheses for why this phenomenon might have occurred. For one, it is possible that given the fact the participants were early in their training, they may not have had a

clear understanding of what a physician's actual tasks entail, and the ACE course served as a "reality test" for them. Furthermore, the forced exploration that resulted from the course may have provoked further uncertainty and challenged their existing self-concepts. Lastly, Borges posited that this initial exposure may have prompted students to realize that they soon needed to make decisions and choices for which they were not prepared, and this could have led to an increase in worry and concern. Borges concludes that this form of exploratory intervention would be best served when students or trainees already have collected a foundational knowledge-base, and have a realistic pool of information to draw from, such as utilizing 3rd year medical students rather than 1st year. However, regardless of the amount of information one has, the author argues that career counseling and guidance for medical students, as well as any field of study, should be readily available.

Whether vocational identity is discovered and refined through one of the many "theoretical roadways" discussed thus far (e.g., job crafting, occupational engagement, or career adaptability), vocational identity pertains to the field of psychology writ-large in a variety of ways - depending on the depth in which one is examining the varying levels. When an undergraduate student declares their major in psychology, most likely they are unaware of the sometimes overwhelming breadth of options in terms of careers. If they make the decision to pursue graduate school, let alone a specific career, identity has had ample opportunity to evolve and change. Similar to the literature discussed regarding the medical field, there are a large number of specialty areas in the broader field of psychology a person pursues, be it social psychology, experimental psychology, clinical psychology, or the multitude of additional sub-fields. In remaining consistent with

occupational engagement principles, ideally a person has engaged in some degree of exploration and enrichment before pursuing a specific sub-field of psychology; however, this cannot be assumed. When considering applied psychology, or even applied mental health in general, a more specific form of vocational identity that one contemplates during their time as a practitioner, is theoretical orientation. We now turn our focus to the concept of theoretical orientation, which should be considered inextricably connected to the theory of vocational identity discussed thus far.

Theoretical Orientation

Poznanski and McLennan (1995) define theoretical orientation as a set of assumptions that provide a framework for counselors, which include creating a hypothesis regarding a client's behavior or experiences, while providing a rationale for treatment interventions and evaluation. In other words, a therapist's theoretical orientation is the way in which client change is conceptualized, and typically acts as a basis for therapeutic practice. It is in this construct that therapy is guided using specific actions. For example, an introspective psychodynamic approach looks significantly different from an operant behavioral approach. It is important to note, however, that theoretical orientation is not necessarily the same as observed therapeutic technique; orientation is simply the theoretical groundwork. For instance, one of the "third-wave" therapies, known as Acceptance and Commitment Therapy (ACT; Hayes et al., 1999), is actually based on a contextual behavioral theoretical orientation. Thus, ACT-techniques are viewed as a technological extension of said orientation. Therapist techniques may not necessarily align with orientation due to a number of reasons, however. As Poznanski and McLennan (1995) point out, there may be a variety of factors that impact technique

choice, such as agency policy, client needs and expectations, and therapist experience.

Norcross (1985) states that theoretical concepts form the critical foundation for therapeutic practice, but they do not necessarily translate into clinical application.

Operating under the basic assumption that therapeutic techniques should not be viewed synonymously with theoretical orientation, this paper will serve to examine theoretical orientation only.

While the literature has consistently failed to show that one theoretical orientation on average has any superior impact over another with regard to therapeutic outcome effectiveness (referred to as *relative efficacy*; Bergin & Lambert, 1978; Elkin et al., 1989; Goldstein & Stein, 1976, Smith, Glass, & Miller, 1980), the orientation landscape of psychotherapy has still shifted in recent years. For example, more clinicians are identifying with an integrative/eclectic orientation (Boswell, Castonguay, & Pincus, 2009). Integrative/eclectic typifies incorporating techniques and/or formulating cases based on an assortment of theoretical orientations (Norcross & Goldfried, 2005).

According to Mahoney (1995), individuals in 1953 endorsed the following orientations: 46% psychodynamic, 35% eclectic, and 19% humanistic. In 1988, 34% identified as eclectic, 28% psychodynamic, 12% cognitive, 10% behavioral, 9% humanistic, and 7% systems. Norcross (2002) conducted a study through the American Psychological Association (APA) and found that 36% of respondents identified as eclectic, followed by 21% psychodynamic. Thus, the literature has supported an increase in the prevalence of integrative approaches being utilized in client conceptualization. Alternative theoretical orientations remain popular today; Norcross and Rogan (2013) conducted a survey of 428 members of Division 29 of the APA, the Division of Psychotherapy, which was a follow-

up from 1981, 1991, and 2001. Besides psychodynamic (27%), integrative (25%) and cognitive/cognitive-behavioral (17%) orientations having prevailed (and even increased) over the years, clinicians identified as existential (7%), Gestalt (4%), and interpersonal (IPT; 3%). In Canada, Jaimes, Larose-Hébert, and Moreau (2015) surveyed 5,552 psychologists from 1993 and compared the numbers to 8,608 psychologists from 2013, finding that as the most commonly endorsed theoretical orientation, CBT grew from 18.4% to 38%, while preference for other orientations slightly declined (existential-humanistic and psychodynamic/psychoanalytic orientations were the next-most endorsed, with 21.7% and 21.5%, respectively).

In the same conversation as relative efficacy, there exists a debate regarding whether common factors or specific factors are the primary mechanism of change in our clients, therefore questioning if specific factors (e.g., theoretical techniques) are irrelevant (Chambless et al., 1998; Wampold, 2001). Common factors refer to phenomena such as the therapeutic relationship, which some believe functions as a primary vehicle for client change. While a thorough discussion of the debate regarding the relative efficacy of the various theoretical orientations in therapy is beyond the scope of this study, it is important to note that Wampold (2000) has declared that the current research evidence seems to support the notion that common factors rather than specific ingredients (i.e., theoretical orientation) lead to positive outcomes. However, Wampold still argues for the importance of specific ingredients in constructing a cohesive treatment and are therefore “absolutely necessary in therapy” (p. 735). Thus, while some researchers may argue that gauging and measuring theoretical orientation is unnecessary during a time-period when relative efficacy of the multitude of therapeutic approaches has not been

supported, it is still important for practitioners and counselors to adhere to one of the specific approaches grounded in empirical data.

Given that the eclectic/integrative theoretical orientation has become increasingly popular, and arguably the most commonly chosen among practitioners in the United States, Smith (1999) argued that “the long-term dominance of the major theories is over and...an eclectic position has taken over” (p. 270). He posited that this is partially due to theoretical orientations previously being pitted against one another in psychotherapy outcome studies with researchers cheerleading their own theories, thus contributing to the lack of relative efficacy. Smith similarly exclaimed, “the heyday of schools of psychotherapy has past” (p. 269), and, perhaps even more pessimistically, he stated “the declining influence of historically influential theories, the growth of eclecticism, and widespread substitution of biopsychosocial models for traditional theories conspire to diminish the applicability of theoretical orientations to much of modern psychology” (p. 271). Essentially, Smith is issuing a cautionary tale by warning that as eclecticism comes to dominate the field, the entire notion of “empirically supported treatments” will change, since existing treatment is based specifically on preexisting theory. In other words, should a clinician do what makes sense to *them* theoretically (i.e., eclecticism), or should they do what the research dictates (and will these conflict with one another as eclecticism widens in popularity)? In painting a more realistic picture of the field as it exists today, almost 20 years following Smith’s publication the literature reflects a more even distribution of theoretical orientation identification than he predicted (see Norcross & Rogan, 2013), with no such “lack of theory” running rampant. In fact, the transtheoretical model of therapy has become widely accepted in the mainstream, due to

the strength of evidence in support of positive client outcomes (Prochaska & DiClemente, 1982; DiClemente & Prochaska, 1998; Prochaska & DiClemente, 2005).

On the flipside, one of the most prominent advocates for integration of theories, John Norcross, has emphasized how the competition and division among differing theoretical orientations presents an obstacle to progress within the field of psychotherapy (Dattilio & Norcross, 2006; Norcross & Thomas, 1988). Larsson, Broberg, and Kaldo (2013) state that ideally, progress within the field of psychotherapy would lead to the development of a common evidence-based science, without explicit divides between differing theoretical schools, much like other research areas in the health care system. To that point, Larsson et al. point out that a significant difference between the field of psychotherapy and other fields in the health care system is the fact that psychotherapy is structured in different and often-competing theoretical orientations/schools, and yet discussion regarding the consequences of said division is rare. Interestingly, in Sweden all psychotherapists, regardless of theoretical orientation, receive some education and applied training on other orientations from their self-identified theory (Larsson et al., 2013). One obstacle impeding the development towards a trans-theoretical paradigm, that Larsson et al. studied is negative stereotypes, which they argue often arise when people see themselves as belonging to one group (an in-group) that differs from other groups (out-groups). The authors posited that psychotherapists are likely to identify with their own orientation, and thus are likely to have positive biases towards their own in-group and negative biases towards alternative orientations. In an Israeli study of practitioners' views of three well-known orientations (psychoanalytic, eclectic, and behavioral), practitioners were asked to rate both their own personality traits and those of

a “typical therapist” of the three orientations (Keinan et al., 1989). Results showed that therapists stereotyped others in both differing *and* the same orientations as their own, while rating themselves as more flexible than a “typical therapist” in their own category. In the study of Larsson et al. (2013), there were four main hypotheses regarding stereotyping: 1) practitioners from differing theoretical orientations misjudge one another in stereotypical ways, 2) therapists are less likely to use stereotypes in their estimations of those within their own theoretical orientation (the in-group) than of therapists from alternative theoretical orientations (the out-groups), 3) the smallest stereotypical misjudgment will be found in the estimates made by integrative/eclectic therapists, and 4) the general tendency to make stereotypical estimates would not differ between psychodynamic, cognitive, and behavioral therapists and would be better predicted by factors other than the therapist’s theoretical orientation. As expected, all groups demonstrated stereotyping towards competing groups, with the integrative/eclectic participants showing the least amount of stereotyping behaviors. However, in disconfirming hypothesis number four, results indicated that cognitive and behavioral therapists were more inclined to stereotype than their psychodynamic counterpart. In the final conclusions of the study, the authors offer a plea of sorts: “We urge all psychotherapists, the next time you are involved with psychotherapists of an orientation other than your own, please remember that they are not as different from you as you may think” (p. 178).

Given the findings that hold theoretical orientations at the same level with one another in regard to therapeutic effectiveness, orientation is nonetheless highly valued in therapist development. For instance, Luborsky, McLellan, Woody, O’Brien, and

Auerbach (1985) demonstrated large positive correlations between theoretical allegiance to a given orientation (belief in its efficacy), and client outcome. The degree to which a clinician holds allegiance to their orientation varies widely from person to person. Allegiance, as distinguished from adherence, is defined by the extent to which a therapist delivering a treatment believes their particular theoretical-based intervention is efficacious. In contrast, adherence is defined as the degree to which a therapist incorporates and adheres to interventions and approaches prescribed by a particular treatment manual or process. Rogers (1979) expressed a need for congruence between one's practiced techniques and theoretical beliefs, and Smith et al. (1980) found that treatment to which the experimenter had theoretical allegiance produced an average effect size of .95, whereas treatments to which the experimenter had an allegiance that went against treatment procedures produced an average effect size of .66. Similarly, Wampold (2001) cited evidence that those focusing most on manual adherence have been found to sacrifice the therapeutic alliance, and as a result are less effective therapists. However, while research indicates that clinicians' reported therapeutic practice is effective when utilized in congruence with their orientation, the degree to which this occurs varies greatly among individuals (Buckley, Karasu, Charles, & Stein, 1979).

There have also been numerous findings that orientation selection affects practitioner satisfaction, as well as burnout (Fear & Woolfe, 1999; Vasco, Garcia-Marques, & Dryden, 1993). Interestingly, degree of theoretical orientation identification was found to accurately discriminate between psychology students who were being remediated versus non-remediated students, with higher degrees of identification being associated with non-remediation (Koutrelakos, 1986). The same study found higher

levels of autonomy associated with theoretical orientation identification as well. Perhaps most importantly is that theory-driven techniques are empirically supported, ensuring that clients receive a premium quality of care that has significant demonstrated efficacy. However, despite the importance of theory in clinical practice, there is little research surrounding therapist variables in the selection and development of a theoretical orientation (Bitar, Bean, & Bermudez, 2007). In an attempt to examine moderating variables that influence the selection of a particular orientation, Pope and Tabachnick (1994) surveyed 800 therapists and found that psychodynamic therapists were more likely than CBT practitioners to believe that receiving therapy should be a requirement for practicing therapy. Stewart and Chambless (2007) completed a large survey of United States therapists in private practice and found that CBT practitioners maintained significantly more active research productivity (including conducting original research, integrating research, and staying current with the literature) compared to psychodynamic and eclectic practitioners; the authors argue that this finding is not surprising, given that CBT is supported by a large body of research demonstrating its efficacy in treating a range of disorders, whereas there is only supportive empirical evidence for the use of psychodynamic psychotherapy in the treatment of certain disorders. Similarly, CBT practitioners in the same study were found to be more likely to use research evidence to select their own theoretical orientation compared to therapists of other orientations, whereas individuals subscribed to additional theoretical orientations were more likely to rely on their intuition, clinical training, and personal experience with therapy (either received or given) rather than relying on research. Rosin and Knudson (1986) discovered a number of differences between theoretical orientations that existed in their sample of

therapists. For one, therapists in the psychodynamic group reported more conflict and more “mental illness” in their families of origin than the more behaviorally oriented therapists. Psychodynamic therapists reported more “personal” reasons for entering the field of psychology, compared to behavioral therapists reporting less personal and more “external” reasons for choosing psychology as a career. For instance, psychodynamic therapists typically offered motivations that appeared to be directly linked to their own attempts to make sense out of their lives, aspects of their own personalities, families, or interpersonal relationships; conversely, behavioral therapists typically offered more abstract reasons, such as general questions regarding the meaning of life or the global desire to help others. The study replicated previous results that therapists in the psychodynamic group reported seeking personal therapy more often (95%) than therapists in the behavioral group (40%).

As Norcross and Prochaska (1983) point out, developing a theoretical orientation is a complicated process in which “a diversity of interacting variables appears to culminate in the original decision and, presumably, in subsequent theoretical revisions and realignments” (p. 204). There are a variety of factors that come into play, such as supervisor orientation, therapist personality, and graduate training, just to name a few. Several of these factors are discussed in the sections to follow.

Theoretical Orientation Development

From a developmental standpoint, Hackney et al. (2002) describe the need for clinicians to practice from a theory that fits their preexisting notions of human growth and change. Interestingly, several studies have shown that many counselors eventually abandon the theoretical orientation originally selected in graduate training, due to

incompatibility with their current views of human growth and change (Sammons & Gravitz, 1990; Skovholt & Ronnestad, 1992; Stone & Yan, 1997). Is this incompatibility, which has been observed throughout the literature to appear later on in one's professional career, preventable? McAuliffe and Erikson (2000) estimate up to 50% of practitioners are unreflective in selecting a theoretical orientation, leading to incongruent matching between orientation and previously held beliefs. As a prophylactic measure, Guiffrida (2005) argues the importance of self-reflection in considering orientation, and points out a need for examination of development throughout graduate training. One such method of development is pedagogical, or the methods in which trainees are instructed.

On a global level, McAuliffe and Erikson (2000) describe two competing paradigms that have influenced orientation development: modernism and constructivism. Modernists contend that there are universal truths that can be discovered and authenticated, whereas constructivists posit that knowledge is subjective and varies per observer. Those operating through a modernist lens stress the importance of learning terminology and fundamental concepts through reading and lecture, before experiential learning can take place (such as case analyses, role playing, and group discussions). Critics argue that while this method is useful for conveying information (names, dates, terms, etc.), the approach stifles the development of new ways of conceptualization in working with clients (Nelson & Neufeldt, 1998). Similarly, Schon (1995) posits that teaching theories too early can lead to a sort of "theory foreclosure," which hinders self-reflection, exploration, and fosters selective inattention. In contrast, constructivist development stresses the importance of learning through discovery, and allowing trainees to use their newly acquired knowledge *and* predispositions to construct

and express their own views. This type of learning is commonly seen in narrative orientations, which stress context and culture over terminology and rote memorization (Guiffrida, 2005). Von Glaserfeld (1984) proposed a pedagogical model that stresses self-reflection through practice, called radical constructivism. With radical constructivism, trainees are asked to attempt solving a problem before being exposed to the solution. While individuals are forced to rely on previous conceptualizations based on prior experiences, teachers actively attempt to understand the trainees' knowledge framework, allowing for further guidance toward a theoretical model.

An alternative model to constructivist and modernist approaches is Guiffrida's (2005) Emergence Model, which encourages clinicians to try out different interventions based on instincts and preexisting knowledge, with the goal being to help identify strengths that can guide future development toward a particular theory. While this model does not suggest that trainees should be sent out for beginning practicum without preparation, it stresses the importance of basic listening/attending skills, such as asking open-ended questions and demonstrating empathy. Similarly, challenging trainees' assumptions regarding culture and race are encouraged to allow exploration of personal views that may hinder therapeutic ability. Guiffrida contends that the Emergence Model facilitates critical self-reflection and theoretical fit, further illustrating the importance of clinician self-examination in the development of theoretical orientation. Regardless of learning about theory via classroom instruction or experiential exercise, the fact remains that individuals are drawn to specific theories for a variety of reasons.

Bitar, Bean, and Bermudez (2007) developed a contextual model to examine orientation development, splitting the developmental process into two factors: personal context, and professional context. Under the umbrella of personal context, influences are presented as therapist personality, personal philosophy/values, family of origin, and therapist's own experience as a client in therapy. At the philosophical level, Coan (1979) identified eight factors that differentiated theoretical orientations: factual vs. theoretical orientation, impersonal causality vs. personal will, behavioral vs. experiential content emphasis, elementarism vs. holism, biological determinism, environmental determinism, physicalism, and quantitative vs. qualitative orientation. Utilizing these factors as predictors of theoretical orientation, Murdock et al. (1998) found that existential/Gestalt counselors endorsed the most holistic emphasis and the least behavioral (versus experiential) content emphasis. The systems/interpersonal emphasis on the contextual and observable (as compared to mental) causes of behavior fit with their high scores on the physicalism dimension, which assesses "an emphasis on definition, description, and explanation in physical terms" (p. 73). Psychoanalytic therapists generated the lowest scores on physicalism, and were more likely to match their supervisor's theoretical orientations compared to other participants. This group further preferred a supervisor/supervisee theoretical match compared to the other orientations. The cognitive/cognitive-behavioral group demonstrated high levels of behavioral content emphasis, and was elemental and physical in orientation. Murdock argues that these patterns are consistent the cognitive-behavioral attention to thoughts, behavior, and environmental contingencies as the primary foci of intervention. In contrast, the person-

centered therapists produced low scores on the elementarism and physicalism subscales, endorsing an experiential content emphasis (rather than behavioral).

For professional context, the authors outlined undergraduate courses/professors, graduate clinical/academic training, influence of clients, professional development, and clinical sophistication as developmental factors. Within this context, Rosin and Knudson (1986) found that with regards to training experiences, psychodynamic therapists were more likely to describe the “relationship” aspects (i.e., interpersonal relationships and interactions between the therapist and supervisors, professors, clients, and classmates) as having a significant influence on their clinical and theoretical development; behavioral therapists emphasized within their training experiences the readings, coursework, and theory, as opposed to relationships with others, as significantly influential on their theoretical development.

Poznanski and McLennan (2003) cited external variables such as clinical experience, colleagues, supervision, and personality as major influences on theoretical orientation choice. Of these factors, personality traits are perhaps the most widely studied.

Personality and Theoretical Orientation

The Five-Factor Model (FFM) provides a comprehensive framework for describing personality and organizing individual differences, and rather than being based on a single theory of personality, FFM combines a variety of theoretical perspectives (McCrae & Costa, 1989). One such FFM, the OCEAN model, includes five dimensions of personality: Agreeableness, Conscientiousness, Openness to Experience, Neuroticism, and Extraversion. According to McCrae and Costa, Agreeableness is associated with

trust, altruism, cooperation and sympathy, while Conscientiousness includes organizational skills, persistence, and achievement orientation. Openness to Experience is described by imaginativeness, curiosity, sensitivity, and a need for variety, whereas Neuroticism is defined by negative affect and emotional instability characterized by anxiety, anger, and depression. Lastly, Extraversion refers to positive emotions, including being social, active, and dominant. As mentioned previously in Chapter 1, the medical field has extensively studied specialty choice, and has explicitly examined how personality traits are linked with particular specialties; this is especially important, given that theoretical orientation exists as a specialty selection of sorts. Borges and Savickas (2002) examined the relationship between medical specialty and personality characteristics, using the FFM. Among the numerous relationships the authors discovered, they found a significant relationship between anesthesiologists and low levels of Agreeableness and Extraversion, and high levels of Conscientiousness and Openness to Experience. Family practitioners were linked to higher levels of Conscientiousness and lower levels of Extraversion, whereas Obstetricians/Gynecologists demonstrated a relationship with high Conscientiousness and lower Openness to Experience and Agreeableness. The authors examined this relationship with a number of additional specialties, including psychiatrists, internists, support specialists, physiatrists, pediatricians, and surgeons, but overall they posited that the relationship between personality and specialty is loose, and that there is more variation within medical specialties than between them. However, they argue that this does not mean personality should not be included in specialty counseling; rather, personality should be included as one of several factors that students consider in deciding on a specialty, as a form of self-

exploration. This type of self-exploration can be useful in the decision-making process, and can be effective in narrowing down the number of specialties to explore. This self-exploration is equally important in students and trainees examining theoretical orientations, whose relationship with personality characteristics has been investigated.

Ogunfowora and Drapeau (2008) argue that not only is examining the relationship between personality and theoretical orientation useful in assisting novice therapists to select suitable orientations, but it may shed light on whether therapist-client matching based on personality, taking into account theoretical orientation, influences client outcome. Boswell et al. (2009) examined personality traits that are related to theoretical orientation identification of clinicians in-training. Using the Revised NEO Personality Inventory (NEO-PI-R), they found that those who identified as humanistic, systems, or psychodynamic were found to endorse significantly higher levels of Openness to Experience compared to those who identify as cognitive-behavioral (CBT). The authors posit that this is consistent with the nature of humanistic and psychodynamic theories, as they tend to emphasize therapist awareness and acceptance of their own emotional experience in therapy, while cognitive-behavioral theory tends to view emotion as a phenomenon that should be controlled. The authors suggest that these results have implications for trainees, as those who are naturally less open to experiencing emotions will tend to gravitate more toward CBT. Using the NEO-PI-R, Scandell et al. (1997) reported a preference for the humanist orientation positively correlated with Openness to Experience, and identification with CBT correlated positively with Agreeableness, particularly the ‘straightforwardness’ (sincere and frank) facet.

Several studies have investigated the relationship between theoretical orientation and personality using the Myers Briggs Type Indicator (MBTI; Myers, McCaulley, Quenk, & Hammer, 1998), which places individuals on four continua of personality: extraversion or introversion (where you focus your attention), sensing or intuition (how you take in information), thinking or feeling (the way you make decisions based on that information), and judging or perceiving (how you deal with the world). Erickson (1993) asked counselors to rank order their theoretical orientations, and unsurprisingly found that those who subscribed to an “affective” theoretical orientation (grouped as person-centered, Gestalt, or psychoanalytic) were positively correlated with the “feeling” type on the MBTI, whereas those who subscribed to a “cognitive” theoretical orientation (grouped as Adlerian, behavioral, and rational-emotive) were more closely linked to the “thinking” side of the continuum on the MBTI. In a sample of 123 licensed counselors, Dodd and Bayne (2006) found a clear relationship between choice of CBT orientation and preferences for sensing and judging, choice of psychoanalytic orientation and preference for intuition and feeling, and choice of integrative/eclectic orientation and preference for extraversion and intuition. Varlami and Bayne (2007) replicated these findings with a larger sample, demonstrating the robustness of these links.

Arthur (2000) examined personality links to theoretical orientation using the Millon Index of Personality Styles (MIPS), and found CBT therapists scored significantly higher on ‘conforming,’ which measures the degree to which a person relates to authority figures in a cooperative and respectful manner, whereas psychodynamic therapists scored significantly higher on the ‘intuiting’ scale, which assesses preference for lack of structure and symbolic rather than concrete phenomena. Using the same personality

measure in a sample of prospective counseling psychology graduate students, Scragg et al. (1999) broadened the sample of orientations to include directive (CBT, rational-emotive, systemic, Ericksonian, Gestalt, and integrative) and non-directive (existential, psychodynamic and client-centered). The authors found those who identified as more directive therapists rated themselves higher on the conformity scale, whereas non-directives rated themselves higher on the intuiting scale. Directive students also scored higher on the systematizing subscale, defined as orderly, conscientious, and efficient. Interestingly, as a follow-up study Ogunfowora and Drapeau (2008) found that personality was more highly correlated with theoretical orientation in graduate students compared to practitioners. The authors hypothesized that perhaps students rely more on personality to identify a theory while in training, while practitioners utilize a combination of personality with knowledge and experience. Given that the majority of clinicians (both in training and in practice) identify as integrative/eclectic (Norcross, 2002; Boswell et al., 2009), more research needs to be conducted to examine factors that lead to these developments. One domain in which these factors can be studied is a vocational context.

Holland Codes and Theoretical Orientation

In addition to the paucity of research conducted on the development of theoretical orientation, there also exists a dearth that combines these questions in a vocational model, which aims to explain an individual's reasons for either choosing or being attracted toward specific areas of work. Leong and Geisler-Brenstein (1991) argue that vocational psychologists need to attend more to the problem of career specialty choice, which might include theoretical orientation development for clinicians.

A number of studies have been conducted examining the relationship between Holland codes and personality traits. Judge et al. (2002) hypothesized that individuals choose college majors and occupations that are consistent with personality types, therefore there should be a correlation between Holland codes and personality type. They found that *conscientiousness* was strongly related to job satisfaction for individuals in both Conventional and Realistic occupations, which was consistent with their initial hypothesis. Walsh and Eggerth (2005) found a correlation (.29) between congruence (defined in terms of Holland codes) and job performance, and between congruence and job satisfaction (.24). These findings, along with those from Judge et al., suggest that individuals in environments congruent with their vocational personalities tend to be healthier psychologically, more satisfied, and more productive than those in incongruent settings. Similarly, Ahadi (1991) found a significant degree of congruence between Holland codes and the Adult Personality Inventory (API), bolstering the argument that these vocational typologies relate to personality traits.

Given that theoretical orientation can be considered a type of specialty selection within the field of psychology, one recent study could be located that examines Holland codes as predictors of specialty selection within the medical field. Borges, Savickas, and Jones (2004) utilized 289 medical students entering their residency training, and found that 83% of participants had Investigative as their primary or secondary code, and 48% had a combination of Investigative-Social or Social-Investigative for their first and second letter RIASEC code. The authors argue that this finding suggests that approximately half of the physicians who enter family practice, obstetrics/gynecology, pediatrics, surgery, and internal medicine share a combination of traits that characterize

them as warm, cooperative, and friendly as well as curious, rational, and reserved. Furthermore, based on the results of the study, they broke up the participants into two categories of physicians: patient-oriented versus technique-oriented. The second letter of the Holland code determined these categories, with the majority of patient-oriented specialists receiving an Investigative-Social (IS) code, and the majority of technique-oriented specialists receiving an Investigative-Realistic (IR) code. Borges et al. additionally suggest that a potential way to investigate differences among specialties is not simply via the second letter of the RIASEC code, but via the *distance* between the first and second letter scores. Therefore, they suggest that future studies should examine whether or not profile shape interacts with profile content to differentiate specialty choice.

Given the research previously discussed that investigated the link between orientation and personality, specialty choice and Holland codes, as well as Holland codes and personality, it would seem fitting to examine the relationship between theoretical orientation and Holland codes. This is especially true when one considers the link between job satisfaction/productivity and vocational congruence. Considering the vocational nature of theoretical orientation (being that it is work-related and a specialty area of sorts), it is important to ensure satisfaction and productivity for clinicians (both in training and in practice).

Research has examined personality factors related to theoretical orientation, but only one study could be located that examined the relationship between Holland codes and theoretical orientation. Zachar and Leong (1997) surveyed over 200 doctoral students using Holland's Vocational Preference Inventory (VPI; Holland, 1985) and the

Theoretical Orientation Survey (TOS; Coan, 1979). The authors found that there were significant differences in orientation based on track of psychology (i.e., clinical vs. counseling). Specifically, experimental psychology students were found to be more objectivist (by endorsing more behavioral content as the unit of study), while clinical and counseling students were found to be more subjectivist (more oriented toward free will and experiential content). Furthermore, experimental students were found to be more Investigative and less Social compared to clinical and counseling students, which is consistent with the nature of these respective specialty areas, given the applied nature of clinical and counseling and the research-based nature of experimental. Interestingly, counseling students were found to be more people-oriented compared to their clinical counterparts, meaning the Social typology was able to differentiate between the two specialty areas. Overall, the authors argued that younger generation clinicians are more similar than they have been in previous years, and are becoming more and more indistinguishable. Thus, it is important to be able to investigate specific factors that lead individuals to select their orientation, in order to facilitate their optimal choice of specialty area.

Current Study

Given the lack of research conducted since Zachar and Leong's (1997) study, as well as the shift in landscape of orientation discussed earlier, the current study will utilize Holland's vocational typology to predict theoretical orientation, using an updated orientation scale to include more recent theories (e.g., integrative, third-wave contextual, multicultural). The study will also examine professional clinicians in addition to graduate trainees. The first hypothesis is that those higher in Conventional will be more

likely to subscribe to a cognitive/cognitive-behavioral framework. This hypothesis is based on Boswell et al.'s (2009) finding that CBT was less correlated with openness to experience compared to its theoretical counterparts, as well as Arthur's (2002) finding that CBT therapists scored higher on the conforming scales compared to other theoretical orientations.

Norcross, Karpiak, and Lister (2005) surveyed 187 self-identified integrative psychotherapists, a heterogeneous group in terms of theories drawn upon, and found consistent openness in utilizing whichever theory works best for a particular client, often in a "creative" manner. Given the increase in integrative/eclectic orientation and given its creative nature in drawing from several theories, the second hypothesis is that those that are found to be more Artistic will be more likely to subscribe to an integrative/eclectic orientation. Furthermore, Varlami and Bayne (2007) replicated findings that the integrative/eclectic theoretical orientation was closely linked with extraversion. In addition to Artistic, Social is hypothesized to predict an integrative/eclectic theoretical orientation, given the clear similarities between extraversion and Holland's Social theme.

Given the increasing trend of clinicians identifying their theoretical orientation as integrative/eclectic, it is hypothesized that more participants will identify as integrative/eclectic compared to other theoretical orientations. Additionally, it is hypothesized that the most commonly endorsed Holland Code will be Social, Investigative, and Artistic (SIA), due to the fact that counselors and psychologists fall under this occupational code. Similar to Zachar and Leong's (1997) findings, specialty track is predicted to relate to theoretical orientation; specifically, those from a counseling/counseling psychology background will identify as more Social compared to

those with a clinical psychology background. Other differences in theoretical orientation based on personality factors (as measured by the Mini-IPIP) will be explored as well, post hoc.

Chapter III

Method

Participants

Participants in the study were recruited from a larger pool consisting of graduate students and licensed clinicians. Graduate students were further made up of psychology doctoral students (clinical psychology, counseling psychology, and school psychology), as well as master's students in social work and counseling. Prospective participants were recruited throughout the United States via listserv, email, and word-of-mouth. No compensation was provided, and all participants were given the opportunity to enter contact information to receive results of the study as well as to be entered in a raffle to receive one of four, 25-dollar Visa gift cards.

Procedures

Approval was obtained from the University of Kansas Institutional Review Board (IRB) on May 27th, 2015 (ID: STUDY00002680), and each participant was required to consent to the study before beginning the survey. Graduate and internship programs in psychology were randomly selected in all 50 states, via the Commission on Accreditation under the American Psychological Association (APA). Social work programs were located through the Council on Social Work Education (CSWE). Training directors for APA/CSWE accredited graduate programs and APA accredited internship sites were emailed a letter of intention, explaining the study and including a survey link to be distributed to the respective program/site (see Appendix A for a sample letter). To target licensed practitioners, the same information was sent to randomly selected Veterans Affairs Medical Centers, as well as local resources affiliated with the University of

Kansas (such as local community mental health and university counseling centers). Lastly, this information was posted on a number of listservs, specifically Divisions 17 (Counseling Psychology) and 29 (Psychotherapy) of the APA, the Council of Counseling Psychology Training Programs (CCPTP), and the Association of Contextual and Behavioral Sciences (ACBS).

The survey (via Qualtrics) took approximately 10-15 minutes to complete. Each participant was first asked to read an informational statement that included a general description and purpose of the study, potential participation benefits and risks, estimated length of time the survey would take to complete, and researcher contact information (see Appendix B for copy of informational statement). After consenting to participate in the study, participants completed a demographics and education questionnaire, which asked for age, gender, highest degree earned, level of current graduate training, specialty area (i.e., clinical, counseling, etc.), primary treatment population, and number of years of licensure (if applicable). Participants were asked to fill out three primary measures, described in detail in the following section. These measures assessed vocational preferences, personality, and theoretical orientation. No identifying information was collected through the Qualtrics survey, and only those investigators approved through the IRB had access to the data.

Measures

Brief RIASEC Interest Profiler

The Brief RIASEC Interest Profiler (Armstrong, Allison, & Rounds, 2008) is a tool that measures the six types of Holland occupational interests (RIASEC). It draws items from the O*NET Interest Profiler, a public domain measure that includes 180 items

(30 items per RIASEC scale). The Brief RIASEC Interest Profiler was developed to include 48 items, or 8 items per RIASEC scale. Each item consists of an occupation that falls under one of the six Holland types, and participants rate the attractiveness of the occupation on a 5-point Likert scale (1=strongly dislike, 2=dislike, 3=unsure, 4=like, 5=strongly like). Participants are asked to rate each occupation not based on logistical concerns, such as salary or education level, but on how much they would enjoy the type of work. Results then rank order totals for items on each of the six Holland types based on degree of interest, with a score ranging from 8 to 40, which becomes the scaled score. Typically a Holland Code is expressed as the first letters of the three RIASEC types the person most resembles; however, this study will discuss results in terms of scaled scores only, not in terms of Holland Codes.

The Brief RIASEC Interest Profiler demonstrated strong internal consistency in its development sample (mean Cronbach's $\alpha = .87$) and highly stable test-retest reliability (mean correlation = .88; Armstrong, Allison, & Rounds, 2008). The form demonstrated strong convergent and discriminant validity with the O*NET Interest Profiler – Long Form; thus, the authors recommend this measure as acceptable when being used for research purposes, but not for career counseling until additional work is conducted with larger, more diverse normative groups. In this study, alpha was computed to be .886.

Theoretical Orientation Profile Scale - Revised

One noted problem in the literature with measuring theoretical orientation is the self-designation individuals make, given the individualistic interpretation of theoretical labels and their application to actual practice (Poznanski & McLennan, 1995). As an

alternative, many researchers suggest utilizing a dimensional approach, allowing participants to rate a multitude of theoretical orientations, thus providing a more descriptive profile (Poznanski & McLennan). The Theoretical Orientation Profile Scale – Revised (TOPS-R; Worthington & Dillon, 2003) is an 18-item scale containing items for six theoretical areas of psychotherapy: psychoanalytic/psychodynamic, humanistic/existential, cognitive-behavioral, family systems, multicultural, and feminist. Each theory has three items to assess different aspects of orientation: theoretical identification (e.g., “I identify myself as family systems in orientation), conceptual orientation (e.g., “I conceptualize my clients from a family systems perspective), and methodological orientation (e.g., “I utilize family systems therapy techniques”). Each theoretical identification item is rated on a 10-point Likert scale (1 = *not at all* to 10 = *completely*). Methodological and conceptual orientation items are also rated using a 10-point Likert scale (1 = *never* to 10 = *always*). The TOPS-R has demonstrably high internal consistency reliability for each of the six orientations: $\alpha = .96, .95, .95, .95, .95, .94$, for scores from the psychoanalytic/psychodynamic, cognitive-behavioral, humanistic/existential, family systems, feminist, and multicultural subscales, respectively. The measure demonstrated good construct validity through high correlations with a similar orientation subscale (e.g., existential with existential), using the Etiology Attribution Scale, and through negative correlations with divergent orientation subscales (e.g., cognitive-behavioral and psychodynamic; Worthington & Dillon, 2003).

Since this measure was developed and validated in 2003, additional orientations have arisen that are commonplace in psychotherapy, such as contextual behaviorism

(most common applied extensions from which include Acceptance and Commitment Therapy and Dialectical Behavior Therapy). Similarly, as mentioned earlier, eclectic orientation has become the norm throughout the field (Boswell, Castonguay, & Pincus, 2009). Thus, it was deemed important these two orientations be included as part of the measure, and these were added for the study. The final options for theoretical orientations were: Psychodynamic, Humanistic, CBT, Behaviorism, Family Systems, Feminist, Multicultural, ACT, DBT, Integrative/Eclectic, and other/unlisted. In this study, overall alpha was computed to be .853. Since each theoretical orientation on the revised TOPS is broken down into a subscale consisting of three questions (“I identify as..., I conceptualize from..., I utilize techniques from...”), alphas for each individual theoretical orientation set were calculated as well. Alphas for each individual theoretical orientation set are as follows: Psychodynamic was computed to be .955, Humanistic was computed to be .947, CBT was computed to be .940, Behaviorism was computed to be .950, Family Systems was computed to be .968, Feminist was computed to be .939, Multicultural was computed to be .923, Integrative/Eclectic was computed to be .970, ACT was computed to be .963, DBT was computed to be .952, and other/unlisted was computed to be .988.

International Personality Item Pool – Mini Version

The International Personality Item Pool – Mini Version (Mini IPIP) is an abbreviated, 20-item instrument that measures dimensions of the Five Factor Model (FFM) of personality. Donnellan, Oswald, Baird, and Lucas (2006) shortened the measure from the original 50-item IPIP, in order to concisely assess the Big Five factors of personality with acceptable validity. Each of the Big Five factors of personality

(Extraversion, Agreeableness, Conscientiousness, Emotional Stability, Openness) contains four items. Participants are asked to read each statement and using the rating system, indicate how accurately each statement describes them (e.g., “I have a vivid imagination”). Answers range from 1 (very inaccurate) to 5 (very accurate).

Baldasaro, Shanahan, and Bauer (2013) studied the psychometric properties of the Mini IPIP, finding that the scales demonstrate comparable criterion validity and reliability to the original. Donnellan et al. (2006) found consistent and acceptable levels of internal consistency (alpha levels of at least .60), test-retest levels similar to those of the original, as well as comparable levels of convergent, discriminant, and criterion validity. The authors therefore suggest this tool is a psychometrically acceptable, practical, and useful short measure of the Big Five factors of personality. In this study, the alphas for each individual Big Five factor of personality are as follows: Alpha for Extraversion was computed to be .835, Agreeableness was computed to be .638, Conscientiousness was computed to be .771, Emotional Stability was computed to be .699, and Openness was computed to be .678.

Hypotheses

This research project had one main goal, which was to examine factors that predict theoretical orientation in trainees and professionals alike. However, there were several secondary aims of the study as well, such as gauging the “climate” of the field as it stands today in regards to theoretical orientation prevalence. The following were the hypotheses for this study:

- I. Given Boswell et al.’s (2009) finding that CBT was less correlated with openness to experience compared to its theoretical counterparts, as well as

Arthur's (2002) finding that CBT therapists scored higher on the conforming scales compared to other theoretical orientations, the first hypothesis is that those higher in Conventional scores will be more likely to subscribe to a cognitive/cognitive-behavioral theoretical orientation.

- II. Given the increase in integrative/eclectic orientation and given its creative nature in drawing from several theories, the second hypothesis is that those that are found to have higher Artistic scaled scores will be more likely to subscribe to an integrative/eclectic orientation.
- III. In addition to Artistic, Social scores are hypothesized to predict an integrative/eclectic theoretical orientation, given the clear similarities between extraversion and Holland's Social theme.
- IV. Given the increasing trend of clinicians identifying their theoretical orientation as integrative/eclectic, it is hypothesized that more participants will identify as integrative/eclectic compared to other theoretical orientations.
- V. It is hypothesized that the most commonly endorsed Holland Code will be Social, Investigative, and Artistic (SIA), due to the fact that counselors and psychologists fall under this occupational code.
- VI. Specialty track is predicted to relate to RIASEC scaled scores; specifically, those from a counseling/counseling psychology background will identify as more Social compared to those with a clinical psychology background.

- VII. Additional differences in theoretical orientation based on personality factors (as measured by the Mini-IPIP) will be explored as well, post-hoc.

Analyses

This section will first discuss the data entry, modification, and missing data that occurred in the study, followed by an examination of the statistical procedures that were conducted, including an explanation of why these particular analyses were done.

All data were entered into SPSS (Version 22) for data analysis. There was one main dataset that included all data collected throughout the study, as well as several smaller datasets that were used for simplification of certain analyses. Before analyses could be conducted, there were data modifications that were necessary. With regards to the Mini-IPIP, several items had to be reverse-scored in order to be appropriately computed into totals. Specifically, items 6, 7, 8, 9, 10, 15, 16, 17, 18, 19, and 20 were all reverse-scored, conducted via SPSS Syntax. Regarding missing data, there were 26 cases that either started the survey but filled portions of it out, or that started the survey and did not fill out anything. Given the specific nature of the questions being asked (e.g., personality), it was not possible to insert any values in place of the missing data. With regard to demographic data, frequencies and descriptive statistics were computed for the following variables: (a) gender, (b) age, (c) degree, (d) specialty area, (e) years of graduate school (if still in school), (f) licensure status, (g) primary patient population treated, and (h) primary theoretical orientation of the participant's graduate program.

Several of the measures had to be summated to receive total scores. After reverse-scoring items on the Mini-IPIP, they were transformed into new variables that could then be summated along with the non-reverse-scored items. These summations

became one of the five personality types measured by the Mini-IPIP. Similarly, the Brief RIASEC Interest Profiler required data transformation. Each individual Holland Code required summations from the eight items per code. After these items were added together, they were transformed into the individual RIASEC scaled score. Lastly, the Theoretical Orientation Profile Scale – Revised, required summations. Since each theoretical orientation in the TOPS consisted of a subscale with three questions, each of these subscales had to be added, which then became the total theoretical orientation variable. This was conducted for each of the 11 theoretical orientations.

For each of the hypotheses regarding RIASEC predicting theoretical orientation (see hypotheses I-III), a linear regression analysis was conducted. This was similarly true for examining whether personality factors predict theoretical orientation. Since all three variables are continuous in nature, no transformations were necessary. When theoretical orientation (DV) was being predicted, the Independent Variable was entered into a linear regression model with one of the 11 theoretical orientations, and then repeated for the next theoretical orientation. Therefore, 11 linear regressions were conducted when examining the relationship between RIASEC scores and theoretical orientation, and similarly 11 linear regressions were conducted when examining the relationship between personality factors and theoretical orientation. When examining differences among theoretical orientation and other factors, such as specialty area, a univariate Analysis of Variance (ANOVA) was run. Both Independent Variable (e.g., specialty area) and Dependent Variable (theoretical orientation) were entered into the same ANOVA computation, as opposed to when running a linear regression and requiring theoretical orientation to be separated. This was also conducted when examining differences

between specialty area and RIASEC (see hypothesis VI). Lastly, when investigating the hypotheses regarding prevalence of theoretical orientation and most commonly identified RIASEC score (see hypotheses IV and V), mean scores based on frequency and descriptive statistics were examined.

Chapter IV

Results

Demographics

Of the 312 individuals who began the survey, 287 completed the study, thus providing usable data. For a full breakdown of the demographic data, refer to Table 1. Several findings are worth mentioning; specifically, the theoretical orientation with the highest mean score was CBT, meaning participants overall endorsed this theoretical orientation more than others ($M = 19.52$). It is worth noting that eclectic/integrative was the second highest mean score ($M = 18.40$), which was hypothesized to be the highest endorsed theoretical orientation. Additionally, the highest mean score for the RIASEC measure was Social ($M = 30.59$), followed by Investigative ($M = 25.49$) and Artistic ($M = 25.08$). Among the many occupations that fall under this particular Holland Code (SIA) are counselors and psychologists, which was hypothesized to be the most commonly endorsed code. Refer to Table 2 for a full list of mean scores for the TOPS, RIASEC, and Mini-IPIP.

Theoretical Orientation Profile Scale Reliability Analysis

Before conducting a series of regression analyses, the reliability within the Revised TOPS was examined. Each theoretical orientation has three components within the scale: "I identify as...," "I conceptualize from...," and "I utilize..." Theoretically, each of the three components per orientation should be highly correlated with one another, as these items are measuring similar phenomena. All 11 3-item factors demonstrated strong reliability. See Table 2 for a full breakdown.

Table 1

Demographics

Gender of Participants	Percentage (N)
Male	19.9% (N = 55)
Female	79.8% (N = 231)
Other	0.3% (N = 1)
Highest Degree Earned	
Bachelor's	31.8% (N = 96)
Master's	49% (N = 133)
Ph.D.	13.2% (N = 40)
Psy.D.	3.6% (N = 11)
Other (Ed.D, Ed.S., or MPA)	2.3% (N = 7)
Specialty Area	
Clinical Psychology	26.2% (N = 79)
Counseling/Counseling Psychology	41.1% (N = 110)
Social Work	26.5% (N = 79)
Clinical Child Psychology	3.6% (N = 11)
Other (School Psychology or Addictions Counseling)	2.6% (N = 8)
Professional Status	
Graduate Student	71.8% (N = 210)
Licensed Practitioner	27.6% (N = 76)

Table 1 (continued)

Demographics

Current Year of Graduate Training	Percentage (N)
1 st Year	9.6% (N = 28)
2 nd Year	23.1% (N = 65)
3 rd Year	15.7% (N = 47)
4 th Year	11.2% (N = 35)
5 th Year +	12.2% (N = 38)
Years of Licensure	
1-5 Years	11.5% (N = 34)
5-10 Years	5.1% (N = 12)
10-15 Years	1.9% (N = 6)
15-20 Years	2.6% (N = 8)
20 Years +	6.4% (N = 16)
Primary Patient Population	
Children	21.5% (N = 67)
Adolescents	23.1% (N = 72)
Adults	71.8% (N = 200)
Geriatrics	8.7% (N = 27)

Table 2

Scales Means, Standard Deviations, and Coefficient Alphas

TOPS	Mean	SD	alpha (α)
CBT	19.52	7.33	.940
Integrative/Eclectic	18.40	10.70	.970
Multicultural	16.50	8.93	.923
Behaviorism	13.82	8.62	.950
Humanistic	13.49	8.75	.942
Family Systems	11.53	9.57	.968
Feminist	10.89	9.60	.939
ACT	9.40	9.56	.963
DBT	9.28	9.19	.952
Psychodynamic	8.53	8.17	.952
Other/Unlisted	3.50	8.74	.988
O*NET INTEREST PROFILER			
Realistic	15.74	6.07	.866
Investigative	25.49	7.16	.876
Artistic	25.08	7.32	.848
Social	30.59	4.42	.670
Enterprising	19.38	5.59	.780
Conventional	17.28	6.49	.883
IPIP			
Extraversion	12.43	3.73	.835
Agreeableness	18.20	1.98	.638
Conscientiousness	14.72	3.47	.771
Emotional Stability	10.51	3.12	.699
Openness	13.84	2.27	.678

Note. TOPS scores have a possible total of 30, RIASEC scores have a possible total of 40, and personality scores have a possible total of 20.

Correlation Matrices

Similarly, each theoretical orientation was computed in a series of correlations with one another. Since each theoretical orientation has its own items on the instrument, the expectation is that the factors should not correlate highly with one another; otherwise, combining orientations might be warranted. The largest correlation found was between Multicultural and Feminist ($r = .536$), with the next largest being between CBT and Behavioral ($r = .522$). The latter was to be expected given the many similarities in theoretical foundation between CBT and Behaviorism. The next largest correlation drops off significantly, and was between Multicultural and Humanistic ($r = .331$). Given that there are no significantly large correlational values, it can be assumed that each theoretical orientation warrants its own set of items. See Table 3 for the full breakdown of TOPS correlations, and Tables 4-5 for the full breakdown of RIASEC and IPIP correlations, respectively.

Exploratory Factor Analysis

Due to the conceptual overlap between theoretical orientations, an exploratory factor analysis was performed to examine whether any of the orientation items could be loaded onto fewer, broader factors. Due to the “other” category consisting of a wide variety of theoretical orientations, it was removed for the sake of this analysis. After running the analysis, there appeared to be three main factors, which explained 55.48% of the total variance. This was decided based on eigenvalues and cumulative variance, and factors were obliquely rotated using Promax rotation. Factor 1 consists of Humanism (.695), Family Systems (.505), Feminism (.717), Multicultural (.766), and Integrative/Eclectic (.465), and explained

23.25% of the variance with an eigenvalue of 2.33. One could argue that this makes sense given the similarities between the client-driven natures of these orientations. Factor 2 consists of CBT (.727), Behaviorism (.874), ACT (.517), and DBT (.597), and explained 21.62% of the variance with an eigenvalue of 2.16. These four theoretical orientations have several characteristics in common, in that they all incorporate classic behavioral components. Factor 3 consisted of Psychodynamic (.415), as well as Family Systems again (.622) which also loaded onto Factor 1, and explained 10.61% of the variance with an eigenvalue of 1.06. It should be noted that Integrative/Eclectic loaded onto Factor 3, but with a value of -.505. However, this can be interpreted in that Integrative/Eclectic loaded independently onto Factor 3, and both Psychodynamic and Family Systems loaded negatively onto said factor. Whereas Integrative/Eclectic is innately open to a host of theoretical notions, Psychodynamic and Family Systems have a history and reputation for being less flexible in integrating alternative theories that are not congruent with their own. See Table 6 for the full breakdown. A correlation matrix including these three theoretical orientation factors, along with Mini-IPIP and RIASEC scores, is displayed in Table 7.

Participants were given an option to rank-order a theoretical orientation not listed by the TOPS. The unlisted orientations included: narrative therapy, emotion-focused therapy, motivational interviewing, attachment, solution-focused, positive psychotherapy/strengths-based, interpersonal therapy, and mindfulness-based therapy. See Table 8 below for frequencies of the “other” responses.

Table 3

TOPS Correlation Matrix

	PD	Hum	CBT	Beh	FS	Fem	Multi	ACT	DBT	Int
Humanistic	.262									
CBT	-.177	-.119								
Behavioral	-.215	-.110	.522							
Family Syst.	.158	.229	.217	.307						
Feminism	.028	.328	-.034	-.039	.228					
Multicultural	.084	.331	.052	.022	.270	.536				
ACT	.046	.131	.115	.371	.090	.063	.039			
DBT	-.068	-.029	.268	.344	.176	.138	.109	.374		
Integrative	.032	.256	.060	-.052	.109	.129	.180	.094	.205	
Other	.076	.180	-.147	.007	.257	.366	.167	.076	.095	.246

Table 4

RIASEC Correlation Matrix

	Realistic	Investigative	Artistic	Social	Enterprising
Realistic					
Investigative	.364				
Artistic	.198	.342			
Social	.000	.118	.273		
Enterprising	.192	.039	.318	.341	
Conventional	.408	.110	-.092	.031	.432

Table 5

IPIP Correlation Matrix

	Extraversion	Agreeableness	Conscientiousness	Neurotic
Extraversion				
Agreeableness	.178			
Conscientiousness	-.032	.045		
Neurotic	-.049	.041	-.164	
Openness	.138	.073	-.125	.006

Table 6

Exploratory Factor Analysis

TOPS	Factor 1	Factor 2	Factor 3
Family Systems	.505	.228	.622
Humanistic	.695	-.208	-.111
Feminist	.717	-.131	-.021
Multicultural	.766	-.037	.034
Integrative/Eclectic	.465	-.087	-.505
CBT	-.005	.727	.192
Behavioral	.013	.874	.135
ACT	.253	.517	-.345
DBT	.293	.597	-.241
Psychodynamic	.345	-.352	.415

Table 7
RIASEC, IPIP, & Three-Factor Theoretical Orientation Correlation Matrix

	Client	Behav	PD	R	I	A	S	E	C	Extra	Agr	C	N
Client-Centered Factor													
Behavior Factor	-.031												
Psychodynamic Factor	.054	.106											
Realistic	-.018	-.084	-.088										
Investigative	.151	-.014	-.030	.364									
Artistic	-.017	.145	.002	.198	.342								
Social	.122	.140	.182	.000	.118	.273							
Enterprising	.062	.023	.069	.192	.039	.318	.341						
Conventional	.006	-.148	-.028	.408	.110	-.092	.031	.432					
Extra-version	.005	-.053	.133	-.010	-.021	.167	.157	.149	-.060				
Agreeable-ness	-.068	.242	.180	-.201	-.071	.050	.292	-.034	-.120	.178			
Conscientiousness	.052	-.151	.041	-.082	-.047	-.186	.020	.042	.116	-.032	.045		
Neuroticism	.035	.084	.009	.028	-.060	-.035	-.096	.067	.069	-.049	.041	-.164	
Openness	-.005	.161	.062	.047	.115	.398	.175	.006	-.186	.138	.073	-.125	.01

Table 8

Frequencies of Other/Unlisted Theoretical Orientations

Theoretical Orientation	Percentage (N)
Strengths-Based/Positive Psychology	0.9% (N = 3)
Solution-Focused Therapy	1.2% (N = 4)
Attachment Theory	0.6% (N = 2)
Trauma-Based Therapy	0.3% (N = 1)
Emotion-Focused Therapy	0.9% (N = 3)
Functional Analytic Psychotherapy	0.3% (N = 1)
Gestalt	0.3% (N = 1)
Relational/Relational-Cultural	0.6% (N = 2)
Motivational Interviewing	0.3% (N = 1)
Mindfulness-Based Therapy	0.6% (N = 2)
Interpersonal Therapy	2.5% (N = 8)

RIASEC/Theoretical Orientation Regressions

Each of the 11 theoretical orientations was entered as a dependent variable into a separate linear regression model, with RIASEC scale scores as the predictor variables. Of the 11 models run, five were significant: CBT, behaviorism, family systems, feminist, and multicultural. Specifically, Investigative, Artistic, and Social scores positively predicted CBT, Investigative and Artistic scores positively predicted behaviorism, Realistic and Social scores positively predicted family systems, the Social score positively predicted feminism, and Social and Enterprising scores positively predicted multiculturalism. See Tables 9-19 for a full breakdown.

Table 9

Regression of RIASEC Predicting CBT

RIASEC	Beta	R ²	<i>F</i>	<i>p</i>
Realistic	-.063	.001	.297	.371
Investigative	.136	.009	2.462	.043*
Artistic	-.174	.011	3.024	.016*
Social	.135	.023	6.558	.037*
Enterprising	.078	.005	1.335	.305
Conventional	-.003	.000	.002	.969
Total		.048	2.296	.035*

Note. * = $p < .05$; ** = $p < .01$; *** = $p < .001$.

Table 10

Regression of RIASEC Predicting Integrative/Eclectic

RIASEC	Beta	R ²	<i>F</i>	<i>p</i>
Realistic	-.130	.016	4.670	.068
Investigative	.054	.003	.911	.426
Artistic	.007	.000	.095	.929
Social	.024	.000	.089	.718
Enterprising	-.004	.000	.137	.954
Conventional	-.042	.001	.301	.584
Total		.022	1.022	.411

Table 11

Regression of RIASEC Predicting Psychodynamic

RIASEC	Beta	R ²	<i>F</i>	<i>p</i>
Realistic	.043	.000	.055	.547
Investigative	-.093	.004	1.070	.174
Artistic	.075	.002	.676	.308
Social	.009	.000	.137	.894
Enterprising	-.098	.011	3.129	.205
Conventional	-.043	.001	.318	.573
Total		.019	.897	.498

Table 12

Regression of RIASEC Predicting Humanistic

RIASEC	Beta	R ²	<i>F</i>	<i>p</i>
Realistic	.086	.001	.212	.222
Investigative	-.057	.000	.116	.401
Artistic	.045	.008	2.268	.532
Social	.128	.012	3.364	.050
Enterprising	-.015	.004	.995	.845
Conventional	-.107	.007	1.957	.163
Total		.019	1.493	.180

Table 13

Regression of RIASEC Predicting Behaviorism

RIASEC	Beta	R ²	<i>F</i>	<i>p</i>
Realistic	-.042	.000	.091	.548
Investigative	.220	.026	7.550	.001**
Artistic	-.199	.016	4.756	.006**
Social	.100	.011	3.347	.120
Enterprising	.064	.001	.204	.394
Conventional	-.072	.003	.898	.344
Total		.058	2.834	.011*

Note. * = $p < .05$; ** = $p < .01$; *** = $p < .001$.

Table 14

Regression of RIASEC Predicting Family Systems

RIASEC	Beta	R ²	<i>F</i>	<i>p</i>
Realistic	-.148	.014	3.896	.034*
Investigative	.053	.003	.941	.424
Artistic	-.045	.001	.156	.527
Social	.170	.034	9.957	.008**
Enterprising	.077	.005	1.568	.309
Conventional	.011	.000	.023	.880
Total		.057	2.776	.012*

Note. * = $p < .05$; ** = $p < .01$; *** = $p < .001$.

Table 15

Regression of RIASEC Predicting Multicultural

RIASEC	Beta	R ²	<i>F</i>	<i>p</i>
Realistic	-.115	.013	3.750	.095
Investigative	-.003	.001	.263	.960
Artistic	.039	.020	5.871	.581
Social	.164	.036	10.889	.010*
Enterprising	.152	.009	2.782	.042*
Conventional	-.089	.005	1.442	.231
Total		.085	4.264	.000***

Note. * = $p < .05$; ** = $p < .01$; *** = $p < .001$.

Table 16

Regression of RIASEC Predicting Feminism

RIASEC	Beta	R ²	<i>F</i>	<i>p</i>
Realistic	-.047	.011	3.112	.498
Investigative	-.055	.000	.001	.412
Artistic	.109	.022	6.258	.128
Social	.135	.012	3.419	.035*
Enterprising	-.037	.007	2.153	.625
Conventional	-.124	.009	2.704	.101
Total		.061	2.987	.008**

Note. * = $p < .05$; ** = $p < .01$; *** = $p < .001$.

Table 17

Regression of RIASEC Predicting ACT

RIASEC	Beta	R ²	<i>F</i>	<i>p</i>
Realistic	-.004	.002	.447	.959
Investigative	.071	.011	3.170	.294
Artistic	.113	.010	2.961	.122
Social	.052	.001	.441	.425
Enterprising	-.047	.001	.374	.537
Conventional	.013	.000	.030	.862
Total		.026	1.228	.292

Table 18

Regression of RIASEC Predicting DBT

RIASEC	Beta	R ²	<i>F</i>	<i>p</i>
Realistic	.015	.000	.038	.832
Investigative	.115	.008	2.189	.092
Artistic	-.071	.000	.086	.333
Social	-.008	.000	.017	.904
Enterprising	.094	.001	.290	.222
Conventional	-.119	.009	2.398	.123
Total		.018	.835	.544

Table 19

Regression of RIASEC Predicting Other/Unlisted

RIASEC	Beta	R ²	<i>F</i>	<i>p</i>
Realistic	.131	.005	1.344	.064
Investigative	-.066	.001	.258	.328
Artistic	.055	.005	1.494	.447
Social	.098	.005	1.342	.132
Enterprising	-.063	.009	2.510	.409
Conventional	-.088	.005	1.326	.250
Total		.029	1.385	.221

IPIP/Theoretical Orientation Regressions

Each of the 11 theoretical orientations was entered as a dependent variable into a separate linear regression model, with the Five Factor Model personality scores as the predictor independent variable.

When using IPIP scores to predict CBT orientation, no significant equation was found ($F(5, 271) = 2.075, p = .069, R^2 = .037$).

When using IPIP scores to predict integrative/eclectic orientation, no significant equation was found ($F(5, 271) = 1.130, p = .345, R^2 = .020$).

When using IPIP scores to predict psychodynamic orientation, a significant equation was found ($F(5, 271) = 2.341, p < .05, R^2 = .041$). Specifically,

Agreeableness ($p < .01$) significantly and positively predicted psychodynamic orientation.

When using IPIP scores to predict humanistic orientation, a significant equation was found ($F(5, 271) = 3.303, p < .01, R^2 = .057$). Specifically, Agreeableness ($p < .001$) significantly and positively predicted humanistic orientation.

When using IPIP scores to predict behavioral orientation, no significant equation was found ($F(5, 271) = 2.173, p = .057, R^2 = .039$).

When using IPIP scores to predict family systems orientation, no significant equation was found ($F(5, 271) = 1.202, p = .309, R^2 = .022$).

When using IPIP scores to predict feminist orientation, a significant equation was found ($F(5, 271) = 7.459, p < .001, R^2 = .121$). Specifically, Agreeableness ($p < .001$), Conscientiousness ($p < .05$), and Openness to Experience ($p < .01$) were significant, positive predictors.

When using IPIP scores to predict multicultural orientation, a significant equation was found ($F(5, 271) = 5.450, p < .001, R^2 = .091$). Specifically, Agreeableness ($p < .001$) and Openness to Experience ($p < .05$) were significant, positive predictors.

When using IPIP scores to predict ACT orientation, no significant equation was found ($F(5, 271) = .607, p = .695, R^2 = .011$).

When using FFM scores to predict DBT orientation, no significant equation was found ($F(5, 271) = .458, p = .807, R^2 = .008$).

When using FFM scores to predict theoretical orientations not included on the TOPS list, no significant equation was found ($F(5, 271) = .907, p = .477, R^2 = .016$). Refer to Tables 20-29 for the full breakdown.

Table 20

Regression of Mini-IPIP Predicting CBT

Mini-IPIP	Beta	R ²	<i>F</i>	<i>p</i>
Extraversion	.059	.002	.449	.333
Agreeableness	-.050	.001	.348	.412
Conscientiousness	.184	.032	9.008	.003
Neuroticism	.043	.002	.517	.476
Openness	-.018	.000	.085	.771
Total		.037	2.075	.069

Table 21

Regression of Mini-IPIP Predicting Integrative/Eclectic

Mini-IPIP	Beta	R ²	<i>F</i>	<i>p</i>
Extraversion	-.132	.015	4.215	.033
Agreeableness	.071	.005	1.284	.247
Conscientiousness	-.016	.000	.044	.793
Neuroticism	-.003	.000	.002	.961
Openness	-.024	.001	.159	.690
Total		.020	1.130	.345

Table 22

Regression of Mini-IPIP Predicting Psychodynamic

Mini-IPIP	Beta	R ²	<i>F</i>	<i>p</i>
Extraversion	-.031	.000	.028	.616
Agreeableness	.169	.030	8.421	.006**
Conscientiousness	.061	.003	.952	.316
Neuroticism	-.042	.002	.516	.484
Openness	.081	.006	1.779	.183
Total		.041	2.341	.042*

Note. * = $p < .05$; ** = $p < .01$; *** = $p < .001$.

Table 23

Regression of Mini-IPIP Predicting Humanistic

Mini-IPIP	Beta	R ²	<i>F</i>	<i>p</i>
Extraversion	-.107	.004	1.150	.077
Agreeableness	.176	.031	8.731	.004**
Conscientiousness	-.079	.010	2.928	.191
Neuroticism	.059	.003	.910	.329
Openness	.097	.009	2.617	.107
Total		.057	3.303	.007**

Note. * = $p < .05$; ** = $p < .01$; *** = $p < .001$.

Table 24

Regression of Mini-IPIP Predicting Behaviorism

Mini-IPIP	Beta	R ²	<i>F</i>	<i>p</i>
Extraversion	.066	.001	.237	.280
Agreeableness	-.156	.021	5.859	.011
Conscientiousness	.123	.014	3.904	.045
Neuroticism	.049	.002	.666	.419
Openness	-.025	.001	.175	.676
Total		.039	2.173	.057

Table 25

Regression of Mini-IPIP Predicting Family Systems

Mini-IPIP	Beta	R ²	<i>F</i>	<i>p</i>
Extraversion	.065	.007	1.890	.290
Agreeableness	.120	.013	3.694	.052
Conscientiousness	-.031	.001	.221	.617
Neuroticism	.006	.000	.012	.919
Openness	-.029	.001	.228	.633
Total		.022	1.202	.309

Table 26

Regression of Mini-IPIP Predicting Feminism

Mini-IPIP	Beta	R ²	<i>F</i>	<i>p</i>
Extraversion	-.011	.003	.900	.845
Agreeableness	.245	.059	17.212	.000***
Conscientiousness	-.129	.025	7.531	.028*
Neuroticism	.043	.002	.485	.454
Openness	.182	.032	9.868	.002**
Total		.121	7.459	.000***

Note. * = $p < .05$; ** = $p < .01$; *** = $p < .001$.

Table 27

Regression of Mini-IPIP Predicting Multicultural

Mini-IPIP	Beta	R ²	<i>F</i>	<i>p</i>
Extraversion	.019	.006	1.578	.749
Agreeableness	.229	.053	15.445	.000***
Conscientiousness	-.071	.010	2.910	.234
Neuroticism	.070	.004	1.306	.238
Openness	.138	.018	5.437	.020*
Total		.091	5.450	.000***

Note. * = $p < .05$; ** = $p < .01$; *** = $p < .001$.

Table 28

Regression of Mini-IPIP Predicting ACT

Mini-IPIP	Beta	R ²	<i>F</i>	<i>p</i>
Extraversion	-.027	.000	.072	.667
Agreeableness	.008	.000	.026	.902
Conscientiousness	-.045	.004	1.015	.473
Neuroticism	.042	.002	.447	.494
Openness	.075	.005	1.472	.226
Total		.011	.607	.695

Table 29

Regression of Mini-IPIP Predicting DBT

Mini-IPIP	Beta	R ²	<i>F</i>	<i>p</i>
Extraversion	-.082	.005	1.355	.190
Agreeableness	.030	.001	.252	.624
Conscientiousness	-.024	.001	.240	.698
Neuroticism	.002	.000	.000	.980
Openness	.042	.002	.461	.498
Total		.008	.458	.807

RIASEC and IPIP Regressions From Factor Analysis

The results of the exploratory factor analysis can be interpreted to indicate that instead of eleven, discrete theoretical orientations, there are three, broader theoretical orientations that consist of several sub-orientations. Factor 1, consisting of Humanism, Family Systems, Feminism, Multicultural, and Integrative/Eclectic, can be thought of as the “Client-Centered” orientation. Factor 2, consisting of CBT, Behaviorism, DBT, and ACT, can be thought of as the “Behavioral” orientation. Factor 3, consisting of Psychodynamic, Family Systems, and a negatively-loading Integrative/Eclectic, can be thought of as the “Psychodynamic” orientation. For a full explanation of these factor groupings, refer to the “Factor Analysis” paragraph from earlier in this chapter.

Rather than running 22 separate linear regressions (11 for RIASEC predicting each theoretical orientation, and 11 for IPIP predicting each theoretical orientation), these three broader factors were introduced as the dependent variable, requiring only three linear regressions. Block 1 of each regression consisted of the RIASEC scaled scores, and Block 2 consisted of the IPIP scores. Changes in variance when introducing the IPIP scores were examined as well.

When using RIASEC scores to predict the Client-Centered theoretical orientation factor, a significant equation was found ($F(6, 270) = 2.738, p < .05, R^2 = .057$). Specifically, Investigative ($p < .01$) and Artistic scaled scores ($p < .05$) significantly and positively predicted the Client-Centered theoretical orientation. When introducing IPIP scores into the regression model, a significant equation was found ($F(11, 265) = 1.929, p < .05, R^2 = .074, R^2 \text{ Change} = .017$). However, there are no significant IPIP scores that predict the Client-Centered theoretical orientation, and only the Investigative RIASEC score remains significant; thus, introducing the IPIP scores do not appear to add any significant variance to this model.

When using RIASEC scores to predict the Behavioral theoretical orientation factor, a significant equation was found ($F(6, 270) = 2.708, p < .05, R^2 = .057$). However, there are not any individual RIASEC scaled scores that significantly predict this orientation. When introducing IPIP scores into the regression model, a significant equation was found ($F(11, 265) = 3.854, p < .001, R^2 = .138, R^2 \text{ Change} = .081$). Specifically, Extraversion ($p < .05$), Agreeableness ($p < .001$), and Conscientiousness ($p < .05$) significantly and positive predict the Behavioral theoretical orientation. However, the RIASEC scaled scores remain non-significant

as individual predictors. Thus, it appears introducing the IPIP scores does add significant variance to this model.

When using RIASEC scores to predict the Psychodynamic theoretical orientation factor, a significant equation was found ($F(6, 270) = 2.215, p < .05, R^2 = .047$). Specifically, the Social ($p < .01$) scaled score significantly and positively predicted the Psychodynamic theoretical orientation. When introducing IPIP scores into the regression model, a significant equation was found ($F(11, 265) = 1.937, p < .05, R^2 = .074, R^2 \text{ Change} = .028$). However, there are no significant IPIP scores that predict the Client-Centered theoretical orientation, and the Social RIASEC score was reduced in significance; thus, introducing the IPIP scores do not appear to add any significant variance to this model. Refer to Tables 30-32 for the full breakdown of these results.

Table 30

*Regression of RIASEC and IPIP Predicting Client-Centered Theoretical Orientation**Factor*

	R^2	R^2 Change	F	p
Block 1				
Realistic				.363
Investigative				.001**
Artistic				.040*
Social				.198
Enterprising				.082
Conventional				.480
Total	.057	.057	2.738	.013*
Block 2				
Extraversion				.712
Agreeableness				.067
Conscientiousness				.350
Neuroticism				.234
Openness				.844
Total	.074	.017	1.929	.036*

Note. * = $p < .05$; ** = $p < .01$

Table 31

Regression of RIASEC and IPIP Predicting Behavioral Theoretical Orientation Factor

	R ²	R ² Change	F	p
Block 1				
Realistic				.408
Investigative				.650
Artistic				.088
Social				.077
Enterprising				.962
Conventional				.138
Total	.057	.057	2.708	.014*
Block 2				
Extraversion				.024*
Agreeableness				.000**
Conscientiousness				.039*
Neuroticism				.315
Openness				.118
Total	.138	.081	3.854	.000**

Note. * = $p < .05$; ** = $p < .001$

Table 32

*Regression of RIASEC and IPIP Predicting Psychodynamic Theoretical Orientation**Factor*

	R^2	R^2 Change	F	p
Block 1				
Realistic				.325
Investigative				.912
Artistic				.528
Social				.003**
Enterprising				.705
Conventional				.672
Total	.047	.047	2.215	.042*
Block 2				
Extraversion				.111
Agreeableness				.083
Conscientiousness				.679
Neuroticism				.677
Openness				.455
Total	.074	.028	1.937	.035*

Note. * = $p < .05$; ** = $p < .01$

Specialty Field, RIASEC, and Theoretical Orientation ANOVAs

Each specialty field was considered in a univariate analysis of variance (ANOVA) to examine differences with regard to the RIASEC scaled scores. This was conducted to compare the findings to existing literature in terms of vocational preferences differentiating specialty areas. Initially, the specialty areas consisted of clinical, clinical child, counseling, and social work; however, due to the extremely small sample of clinical child responses ($N = 11$), as well as the fact that clinical child is often considered a sub-specialty within the clinical field, clinical and clinical child cells were merged.

Significant differences were found across the Social type with regard to specialty area ($F(2, 277) = 4.296, p < .05$). Specifically, individuals in the social work field scored significantly higher Social scaled scores compared to those in the clinical field as well as compared to those in the counseling field ($p < .05$).

Each specialty field was computed in an ANOVA to examine differences with regard to theoretical orientations. Significant differences were found between specialty area and those that identify as humanistic, CBT, behavioral, family systems, feminist, multicultural, integrative/eclectic, and DBT. See Tables 33 & 34 for the full breakdown of results.

Each level of education (highest degree earned) was computed in an ANOVA to examine differences with regard to theoretical orientations. Significant differences were found with regard to individuals who identified as family systems ($F(4, 278) = 6.183, p < .001$), feminist ($F(4, 278) = 2.972, p < .05$), and multicultural ($F(4, 278) = 4.458, p < .01$). Specifically, participants whose highest degree was a

bachelor's identified as significantly more family systems compared to those with both a master's degree ($p < .01$) and a Ph.D. ($p < .001$). Participants whose highest degree was a bachelor's identified as significantly more feminist compared to those with a Ph.D. ($p < .05$). Participants whose highest degree was a bachelor's identified as significantly more multicultural compared to those with a Ph.D. ($p < .01$), and those whose highest degree was a master's identified as significantly more multicultural compared to those with a Ph.D. ($p < .01$). Refer to Table 35 for the complete listing of results.

Table 33

Differences Between Specialty Areas and RIASEC ANOVA

RIASEC	Social Work (SD)	Clinical (SD)	Counseling (SD)	df	F	p
Realistic	15.49 (6.36)	16.51 (6.36)	15.45 (5.70)	2, 277	.875	.418
Investigative	24.73 (7.74)	26.94 (6.84)	24.83 (6.70)	2, 277	2.712	.068
Artistic	24.84 (7.77)	24.70 (7.80)	25.31 (6.57)	2, 277	.194	.824
Social	31.88 (4.40)	30.18 (4.67)	30.12 (4.15)	2, 277	4.296	.015**
Enterprising	19.33 (6.09)	19.48 (5.49)	19.44 (5.45)	2, 277	.015	.985
Conventional	16.36 (6.27)	18.47 (7.50)	17.25 (5.77)	2, 277	2.187	.114

Note. * = Individuals in counseling scored significantly higher than those in clinical and/or social work; ** = Individuals in social work scored significantly higher than those in counseling and/or clinical; *** = Individuals in clinical scored significantly higher than those in counseling and/or social work. Social Work= RIASEC mean score for Social Work; Clinical = RIASEC mean score for Clinical Psychology; Counseling = RIASEC mean score for Counseling.

Table 34

Differences Between Specialty Areas and TOPS ANOVA

TOPS	Social Work (SD)	Clinical (SD)	Counseling (SD)	df	F	p
Psychodynamic	11.69 (7.73)	8.41 (8.03)	10.60 (8.15)	2, 249	2.919	.056
Humanistic	15.83 (7.66)	10.27 (7.59)	17.06 (7.81)	2, 248	18.162	.000* **
CBT	21.49 (6.17)	21.42 (6.92)	18.17 (6.72)	2, 259	7.771	.001** ***
Behavioral	16.11 (7.27)	17.35 (8.37)	12.52 (7.78)	2, 243	9.225	.000 ** ***
Integrative/Eclectic	18.89 (9.23)	19.28 (10.31)	22.10 (9.04)	2, 245	3.068	.048*
Family Systems	20.00 (7.50)	11.75 (8.64)	9.78 (8.68)	2, 228	30.984	.000**
Feminist	15.91 (8.97)	9.29 (8.75)	13.48 (9.08)	2, 224	8.560	.000* **
Multicultural	19.49 (7.60)	15.14 (8.74)	18.34 (8.25)	2, 249	5.525	.004* **
DBT	14.16 (10.08)	13.15 (8.98)	8.96 (7.75)	2, 208	7.245	.001** ***
ACT	11.88 (8.79)	13.89 (10.04)	10.74 (9.27)	2, 200	2.130	.121
Other	16.55 (13.71)	7.17 (11.20)	11.85 (12.71)	2, 180	2.985	.056

Note. * = Individuals in counseling scored significantly higher than those in clinical and/or social work; ** = Individuals in social work scored significantly higher than those in counseling and/or clinical; *** = Individuals in clinical scored significantly higher than those in counseling and/or social work. Social Work= TOPS mean score for Social Work; Clinical = TOPS mean score for Clinical Psychology; Counseling = TOPS mean score for Counseling.

Table 35

Level of Education ANOVA

TOPS	BA (SD)	MS (SD)	PhD (SD)	PsyD (SD)	Other (SD)	df	F	p
Psychodynamic	9.01 (7.75)	8.23 (8.19)	9.03 (8.97)	7.00 (7.62)	8.43 (10.71)	282	.252	.908
Humanistic	13.98 (8.72)	13.99 (8.71)	10.97 (8.41)	11.45 (9.31)	14.43 (10.52)	282	1.140	.338
CBT	19.13 (7.60)	20.04 (7.13)	19.24 (7.21)	19.27 (6.56)	15.86 (10.07)	282	.692	.598
Behavioral	13.47 (8.27)	13.66 (8.50)	14.32 (9.21)	16.00 (9.72)	15.14 (11.98)	282	.294	.882
Integrative/Ecle ctic	17.99 (10.36)	18.78 (10.95)	16.97 (10.83)	22.27 (10.06)	17.71 (11.19)	282	.609	.657
Family Systems	15.03 (10.19)	10.26 (8.77)	7.42 (8.31)	11.00 (7.32)	16.43 (12.71)	282	6.183	.000*
Feminist	12.52 (9.35)	11.21 (9.67)	6.79 (8.42)	7.09 (9.43)	12.71 (12.19)	282	2.972	.020*
Multicultural	18.09 (8.12)	16.66 (9.07)	11.34 (8.20)	17.00 (7.50)	20.57 (12.63)	282	4.458	.002* **
DBT	8.21 (9.11)	9.61 (9.14)	9.68 (8.45)	13.27 (11.82)	7.71 (10.86)	282	.929	.448
ACT	7.59 (8.72)	10.46 (9.43)	7.82 (10.17)	13.45 (11.20)	12.86 (12.69)	282	2.242	.065

Note. * = Individuals with the highest degree of bachelor's identified significantly stronger than those with a master's and/or Ph.D.; ** = individuals with the highest degree of master's identified significantly stronger than those with a Ph.D.; *df* = 4, 278.

Chapter V

Discussion

Summary

Determining factors that accurately predict theoretical orientation is important for a number of reasons. Previous research has found burnout and job satisfaction directly related to theoretical orientation, as well as demonstrating a link between believing in one's orientation and client outcome (Fear & Woolfe, 1999; McLellan et al., 1985; Vasco et al., 1993). Additionally, it has been found that many clinicians abandon their theoretical orientation originally selected during graduate school (Sammons & Gravitz, 1990; Skovholt & Ronnestad, 1992; Stone & Yan, 1997). Whether theoretical orientation or specialty area, both of which are viewed as important aspects of applied mental health, creating a congruent match for the individual is important. Having an inconsistency exist that can lead to job burnout or overall dissatisfaction may be avoidable; the ultimate goal of this study was to examine these relationships in order to create an optimal vocational experience for those pursuing the field.

Participants endorsed Cognitive Behavioral Therapy as the most common theoretical orientation. It was hypothesized that clinicians and trainees would most commonly identify as integrative/eclectic, which turned out to be the second-most commonly reported theoretical orientation. Based on the series of longitudinal surveys conducted by Norcross and Rogan (2013), however, the increasing prevalence in both integrative/eclectic and CBT orientations over the last decade speaks to the finding that even though Integrative/Eclectic was the second-most

reported theoretical orientation, both CBT and Integrative/Eclectic were the two most frequently reported by a large margin. As discussed earlier, there are a variety of factors that can contribute to a clinician endorsing an integrative/eclectic viewpoint, despite the previously held belief that this orientation was an artifact of uncertainty or lack of experience (Norcross & Goldfried, 2005). Given the results of this study, it is important to recognize that the integrative/eclectic theoretical orientation functions as a legitimate identity for a significant portion of therapists, both in training and for those licensed.

The most common Holland Code found for participants was Social, Investigative, Artistic (SIA), as hypothesized. Therapists/counselors and psychologists are prototypical occupations included in this particular Holland Code, adding further validity evidence for the RIASEC Interest Profiler. Additionally, given the array of specialty areas represented in the study (social work, counseling psychology, clinical psychology, clinical child psychology, addictions counseling, school psychology), this finding illustrates the similar overarching vocational interests among subfields. The hypothesis that counseling psychology participants would identify as significantly more Social compared to clinical psychology was supported; however, social work participants identified as significantly more Social than all other specialty areas. Zachar and Leong (1997) found counseling psychologists to be more “people-oriented” compared to their clinical counterparts, but agreed that newer training classes are becoming more indistinguishable, thus needing additional specific factors that can facilitate optimal choice of specialty area.

Both counseling psychology and social work participants were found to endorse more of a humanistic orientation compared to clinical psychology participants, while clinical psychology participants identified as significantly more behavioral and cognitive-behavioral compared to their counseling counterparts. These findings are consistent with specialty areas displaying tendencies toward particular theories; clinical psychology programs often teach trainees through a behavioral or cognitive-behavioral lens, whereas those in counseling psychology often demonstrate humanistic, multicultural, and feminist orientations (Norcross, 2002). Since DBT has clear behavioral underpinnings, the finding that clinical psychology individuals endorsed this orientation more than counseling psychology is unsurprising, as is the result that counseling psychology participants endorsed both multicultural and feminist orientations significantly more than clinical psychology participants. One surprising finding was that those in counseling psychology endorsed the integrative/eclectic orientation significantly more than other participants. One possible explanation for this is the tendency for counseling psychologists to endorse a variety of theoretical orientations (i.e., multicultural, feminist, humanistic) that are eclectic in nature, whereas those in clinical psychology were found to consistently endorse more of a behavioral and cognitive-behavioral theoretical orientation.

In terms of the RIASEC scaled scores predicting theoretical orientation, the hypothesis that the Conventional score would predict CBT was not confirmed; rather, the Investigative score was found to be a significant predictor. An argument can still be made, however, given that Holland describes the Investigative type as

“rational, analytical, and logical” (Holland, 1985), that this is in fact consistent with CBT. Compared to other theoretical orientations, CBT is inclined towards a logical examination of one’s thoughts, as well as challenging irrational beliefs as they arise. Similar to the finding that the Social score discriminated among specialty areas, using the Investigative Holland Code could help gauge a clinician’s compatibility with CBT.

While there were no significant predictors found for the integrative/eclectic theoretical orientation, the Investigative type was found to be a significant predictor of the behavioral orientation. Given the obvious similarities between traditional behaviorism and CBT, the relationship appears logical, further bolstered by the finding that both CBT and behaviorism loaded onto the same factor during the EFA. Additionally, the Social score acted as a significant predictor of both multicultural and feminist orientations. Since both of these theoretical orientations are socially progressive and take societal context into account, individuals trending toward more of a Social interest naturally would be drawn toward either theory. Interestingly, after combining the theoretical orientations into three broader factors and re-running the same regressions, Investigative and Artistic RIASEC scores significantly predicted the Client-Centered orientation cluster, and Social scores predicted the Psychodynamic orientation cluster. While the Behavioral cluster regression model was significant, there did not appear to be any specific RIASEC scores that acted as significant predictors. Overall, compared to the regression models run for each individual theoretical orientation, it seems that combining individual orientations into broader factors changes the outcome significantly. It is

difficult to extrapolate any clinical utility from this comparison, however. Future research could implement these combined theoretical orientations initially, such that participants are able to subscribe only to the three.

The relationship among the Five Factor Model of personality and theoretical orientations were surprising, in the sense that the results were inconsistent with previous literature. Extraversion did not significantly predict an integrative/eclectic orientation, as discovered and replicated by Varlami and Bayne (2007). The results of this study demonstrated a predictive relationship between Agreeableness and Openness to Experience and a number of orientations, specifically, psychodynamic, multicultural, feminist, and humanist. While it is unclear why Agreeableness and Openness to Experience predicted some theoretical orientations and not others, the finding that CBT was not significantly correlated with Openness to Experience is consistent with the literature (Boswell et al., 2009). Furthermore, after combining the IPIP into the same model as the RIASEC scores, results indicated that the IPIP did not add any significant variance for two of the three models. The IPIP scores added significant variance for the Behavioral theoretical orientation factor (consisting of CBT, DBT, ACT, and Behaviorism), specifically demonstrating Extraversion, Agreeableness, and Conscientiousness acting as significant predictors. Overall, however, it is difficult to extrapolate these results into any meaningful clinical implications. Given the constraints of this study, future research that can utilize a more psychometrically validated instrument, such as the NEO, is encouraged.

Clinical Utility

Overall, the results of the study suggest a number of clinical utilities with respect to facilitating the exploration of theoretical orientation. Based on the findings, drawing on Holland Codes can function as a roadmap towards investigating not only theoretical orientations, but specialty areas as well. It is important to note that Holland Codes are suggestive in nature, and in no way should foreclose or rule out particular theoretical orientations. Given that these findings implicate multiple theoretical orientations attached to the Social and Investigative scaled scores, the relationships serve as a jumping-off-point, and the exploration can be further refined using additional tools. For example, if a graduate trainee finds they identify as more of a Social type, specifically discussing feminist and multicultural theories might facilitate their exploration process. The same is true for potential graduate students in the mental health field that are unsure which specialty area to pursue. These results show both RIASEC scores and theoretical orientation as able to differentiate specialty area, and therefore can be utilized as a tool to assist in the exploration process.

Limitations

Given the non-randomization approach to disseminating the survey to prospective participants, there are certain selection biases that could have arisen, or individual characteristics that may have altered the validity of the study. Selecting agencies with which the University of Kansas has an established relationship may limit the generalizability to the larger population of psychology and its related fields. Furthermore, given the lack of data specifically examining the link between Holland

Codes and theoretical orientation, some of the a priori hypotheses have little empirical foundation and are largely exploratory in nature. With regard to the TOPS, despite being modified from an empirically validated measure, the current study did little beyond examining reliability correlations to support its validity. Conducting a psychometric properties assessment was beyond the scope of this study, and therefore the modified TOPS should not be used for clinical purposes until such research is conducted.

Future Direction

As stated earlier, there were restrictions in this study that dictated which measures were implemented. While several hypotheses were confirmed, future research that utilizes more empirically validated measures, particularly regarding personality measurement, is encouraged. Expanding the study across the country is recommended as well to maximize the generalizability of the results. While demographic information was not collected pertaining to race or ethnicity, one potential area of interest would be including these to examine any differences in either Holland Codes or theoretical orientation preferences, and to diversify the results as much as possible. The current study was predominantly completed by graduate students/trainees (71.8%); in order to examine the link between vocational interests and theoretical orientation, future research that targets additional licensed practitioners, particularly those who have practiced for at least ten years, could help shed light on the evolution or solidification of clinicians' theoretical orientation. Lastly, additional research that employs qualitative data would allow for participants to describe reasons for their preferences or theoretical

orientation development, which could not be captured via quantitative measurement. For example, allowing a participant to explicate the reason(s) for being drawn to a particular theory could help inform which additional variables (if any) should be included in any follow-up studies.

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Appendix A: Distribution Letter

Dear Mental Health Practitioners and Graduate Students,

My name is Michael Rosen, and I would like to request your participation in my dissertation study examining predictors of theoretical orientation development in practicing clinicians and graduate trainees. Specifically, I am interested in exploring the relationships among personality, vocational types, and theoretical orientation, and your knowledge and experiences in this area would greatly benefit the research!

Participation in the study is entirely voluntary, and can be terminated at any point if so desired. The survey is estimated to take 10-15 minutes to complete, and you can choose to enter a drawing for one of four \$25 VISA gift cards upon completion of the survey.

To be eligible for participation, you must be either: currently enrolled in a graduate mental health training program that teaches psychotherapy/counseling (counseling/counseling psychology, clinical psychology, clinical child psychology, marriage and family therapy, and social work), or a licensed practicing clinician who currently conducts psychotherapy/counseling. **If you are currently a graduate student, we ask you only participate if you have taken coursework in theories of psychotherapy, as well as had at least one semester of practicum.**

There are no foreseen risks to participate in the study, and the benefits include enhancing a specific area of research that has a dearth of empirical data.

This study has been approved by the University of Kansas Institutional Review Board (IRB # STUDY00002680). If you are interested in participating, please click on the website link below, which will take you directly to the survey. Information related to the purpose of the study and informed consent is provided on the first page of the survey.

https://kansasedu.qualtrics.com/SE/?SID=SV_006mldLFkjcwjOd

If you have questions related to this study, please feel free to contact me or my advisor, Dr. Thomas Krieshok, whose contact information is listed below.

Sincerely,

Michael L. Rosen, M.S.

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Appendix B: Information Statement

The Department of Educational Psychology at the University of Kansas supports the practice of protection for human subjects participating in research. The following information is provided for you to decide whether you wish to participate in the present study. You should be aware that even if you agree to participate, you are free to withdraw at any time without penalty.

We are conducting this study to better understand predictors of theoretical orientation in applied psychologists. To participate in this study, we ask you are in an applied psychology or related field (e.g., social work), and are either in graduate training or treat clients professionally (with licensure). This will entail your completion of a brief survey. Your participation is expected to take approximately 15-20 minutes to complete. The content of the survey should cause no more discomfort than you would experience in your everyday life.

Although participation may not benefit you directly, we believe that the information obtained from this study will help us gain a better understanding of factors related to the development of a clinician's theoretical orientation. Your participation is solicited, although strictly voluntary. Your name will not be associated in any way with the research findings, nor will any identifiable information be given for this study. Only those listed below will have access to the data, which will be stored on a secured network through the University of Kansas server (within the Educational Psychology department located in the School of Education). It is possible, however, with Internet communications, that through intent or accident someone other than the intended recipient may see your response.

If you would like additional information concerning this study before or after it is completed, please feel free to contact us by email.

Completion of the survey indicates your willingness to take part in this study and that you are at least 18 years old. If you have any additional questions about your rights as a research participant, you may call (785) 864-7429 or write the Human Subjects Committee Lawrence Campus (HSCL), University of Kansas, 2385 Irving Hill Road, Lawrence, Kansas 66045-7563, email irb@ku.edu.

Sincerely,

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Appendix C: Mini-IPIP

Instructions: On the following pages, there are phrases describing people's behaviors. Please use the rating scale below to describe how accurately each statement describes you. Describe yourself as you generally are now, not as you wish to be in the future. Describe yourself as you honestly see yourself, in relation to other people you know of the same sex as you are, and roughly your same age. So that you can describe yourself in an honest manner, your responses will be kept in absolute confidence. Please read each statement carefully, and then fill in the bubble that corresponds to the number on the scale.

1=Very Inaccurate

2=Moderately Inaccurate

3=Neither Inaccurate nor Accurate

4=Moderately Accurate

5=Very Accurate

1. Am the life of the party (E)
2. Sympathize with others' feelings (A)
3. Get chores done right away (C)
4. Have frequent mood swings (N)
5. Have a vivid imagination (I)
6. Don't talk a lot (E)
7. Am not interested in other people's problems (A)
8. Often forget to put things back in their proper place (C)
9. Am relaxed most of the time (N)
10. Am not interested in abstract ideas (I)
11. Talk to a lot of different people at parties (E)
12. Feel others' emotions (A)
13. Like order (C)
14. Get upset easily (N)
15. Have difficulty understanding abstract ideas (I)
16. Keep in the background (E)
17. Am not really interested in others (A)
18. Make a mess of things (C)
19. Seldom feel blue (N)
20. Do not have a good imagination (I)

Appendix D: Brief RIASEC Interest Profiler

The following measure has 48 items about work activities that some people do on their jobs. Read each item carefully and decide how you would feel about doing each type of work: (1=Strongly Dislike; 2=Dislike; 3=Unsure; 4=Like; 5=Strongly Like). As you answer each item, try NOT to think about if you have enough education or training to do the work, or how much money you would make doing the work. Just think about if you would enjoy the work.

Test the quality of parts before shipment
Study the structure of the human body
Conduct a musical choir
Give career guidance to people
Sell restaurant franchises to individuals
Generate the monthly payroll checks for an office
Lay brick or tile
Study animal behavior
Direct a play
Do volunteer work at a non-profit organization
Sell merchandise at a department store
Inventory supplies using a hand-held computer
Working on an offshore oil-drilling rig
Do research on plants or animals
Design artwork for magazines
Help people who have problems with drugs or alcohol
Manage the operations of a hotel
Use a computer program to generate customer bills
Assemble electronic parts
Develop a new medical treatment or procedure
Write a song
Teach an individual an exercise routine
Operate a beauty salon or barber shop
Maintain employee records
Operate a grinding machine in a factory
Conduct biological research
Write books or plays
Help people with family-related problems
Manage a department within a large company
Compute and record statistical and other numerical data
Fix a broken faucet
Study whales and other types of marine life
Play a musical instrument
Supervise the activities of children at a camp
Manage a clothing store
Operate a calculator
Assemble products in a factory

Work in a biology lab
Perform stunts for a movie or television show
Teach children how to read
Sell houses
Handle customers' bank transactions
Install flooring in houses
Make a map of the bottom of an ocean
Design sets for plays
Help elderly people with their daily activities
Run a toy store
Keep shipping and receiving records